

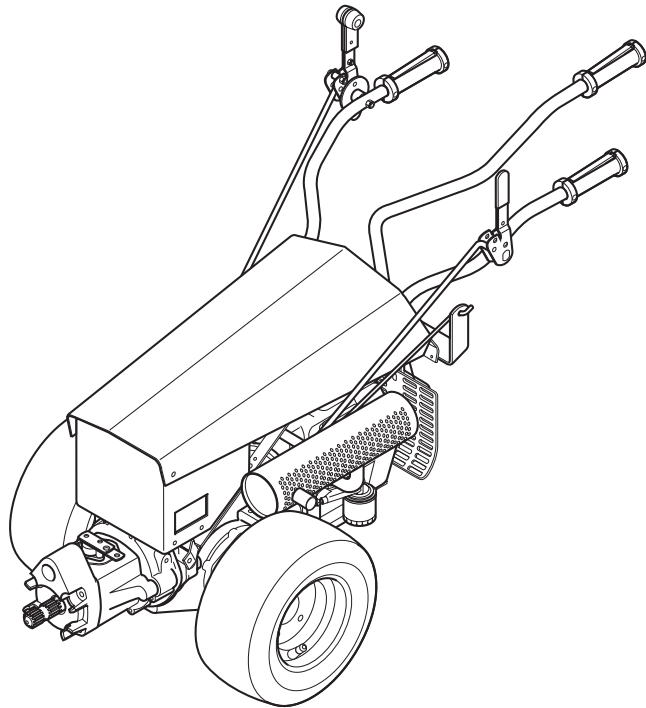


Professional 2-Wheel Tractor

Parts Manual

Models

985114
985117
985119
985307
985309
985311
985312
985313



THE MANUAL

Before you operate your unit, carefully and completely read manuals supplied with the unit. The contents will provide you with an understanding of safety instructions and controls during normal operation and maintenance.

For your safety and the safety of others always read, understand, and follow all DANGER, WARNING, and CAUTION messages found in manuals and on safety decals.

Hardware descriptions are given in decimals.

Decimals to Fractions			
.063	1/16	.563	9/16
.125	1/8	.625	5/8
.188	3/16	.688	11/16
.250	1/4	.750	3/4
.313	5/16	.813	13/16
.375	3/8	.875	7/8
.438	7/16	.938	15/16
.500	1/2	1.00	1

SERVICE AND REPLACEMENT PARTS

When ordering replacement parts or making service inquiries, know the Model and Serial numbers of your unit and engine.

Numbers are located on the product registration card in the unit literature package. They are printed on a serial number label, located on the frame of your unit.

- Record Unit Model and Serial numbers here:

- Record Engine Model and Serial numbers here:

UNAUTHORIZED REPLACEMENT PARTS

Use only Gravelly replacement parts. The replacement of any part on this vehicle with anything other than a Gravelly authorized replacement part may adversely affect the performance, durability, or safety of this unit and may void the warranty. Gravelly disclaims liability for any claims or damages, whether warranty, property damage, personal injury or death arising out of the use of unauthorized replacement parts.

PRODUCT REGISTRATION

The Gravelly dealer must register the product at the time of purchase. Registering the product will help the company process warranty claims or contact you with the latest service information. All claims meeting requirements during the limited warranty period will be honored, whether or not the product registration card is returned. Keep a proof of purchase if you do not register your unit.

Customer Note: If Dealer does not register your product, please fill out, sign and return the product registration card to Gravelly.

YOUR SATISFACTION IS IMPORTANT

Questions? Please follow these helpful steps:

1. Refer to the manuals supplied with your unit.
They will guide you through safe and proper operation and maintenance.
They contain specifications on your unit.
If your questions are not answered in these manuals, go to step number two.
2. Contact Your Dealer.

Our dealers will be happy to supply any service or advice required to keep your unit operating at peak efficiency.

A factory trained staff is available to support your equipment needs. They stock genuine Gravelly parts and lubricants manufactured with the same precision and skill as the original.

If your questions are not resolved by the support staff, ask for the manager or owner.

When contacting your Dealer supply your model and serial numbers.

TO SPEED PARTS ORDERING:

1. Know the model and serial numbers of your unit.
2. Know the part number required.
3. Know the quantity required.
4. Know the part description.

MODELS

Model 985114

16 HP Briggs & Stratton, Electric Start, 4 Speed,
Steering Brakes
Serial No. 000101 and up

Model 985115

8.5 HP Robin, Electric Start, 4 Speed
Serial No. 000101 and up

Model 985117

13.5 HP Robin, Electric Start, 4 Speed,
Steering Brakes
Serial No. 000101 and up

Model 985119

12.0 HP Kohler, Electric Start, 4 Speed,
Steering Brakes
Serial No. 000101 and up

Model 985307

8.5 HP Robin, Electric Start, 4 Speed
Serial No. 000101 and up

Model 985309

13.5 HP Robin, Electric Start, 4 Speed,
Steering Brakes
Serial No. 000101 and up

Model 985311

13.5 HP Robin, Electric Start, 4 Speed,
Differential Lock
Serial No. 000101 and up

Model 985312

13.5 HP Robin, Electric Start, 4 Speed
Serial No. 000101 and up

Model 985313

No Engine, 2 Speed, Differential Lock
Serial No. 000101 and up

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FUEL AND EXHAUST SYSTEM

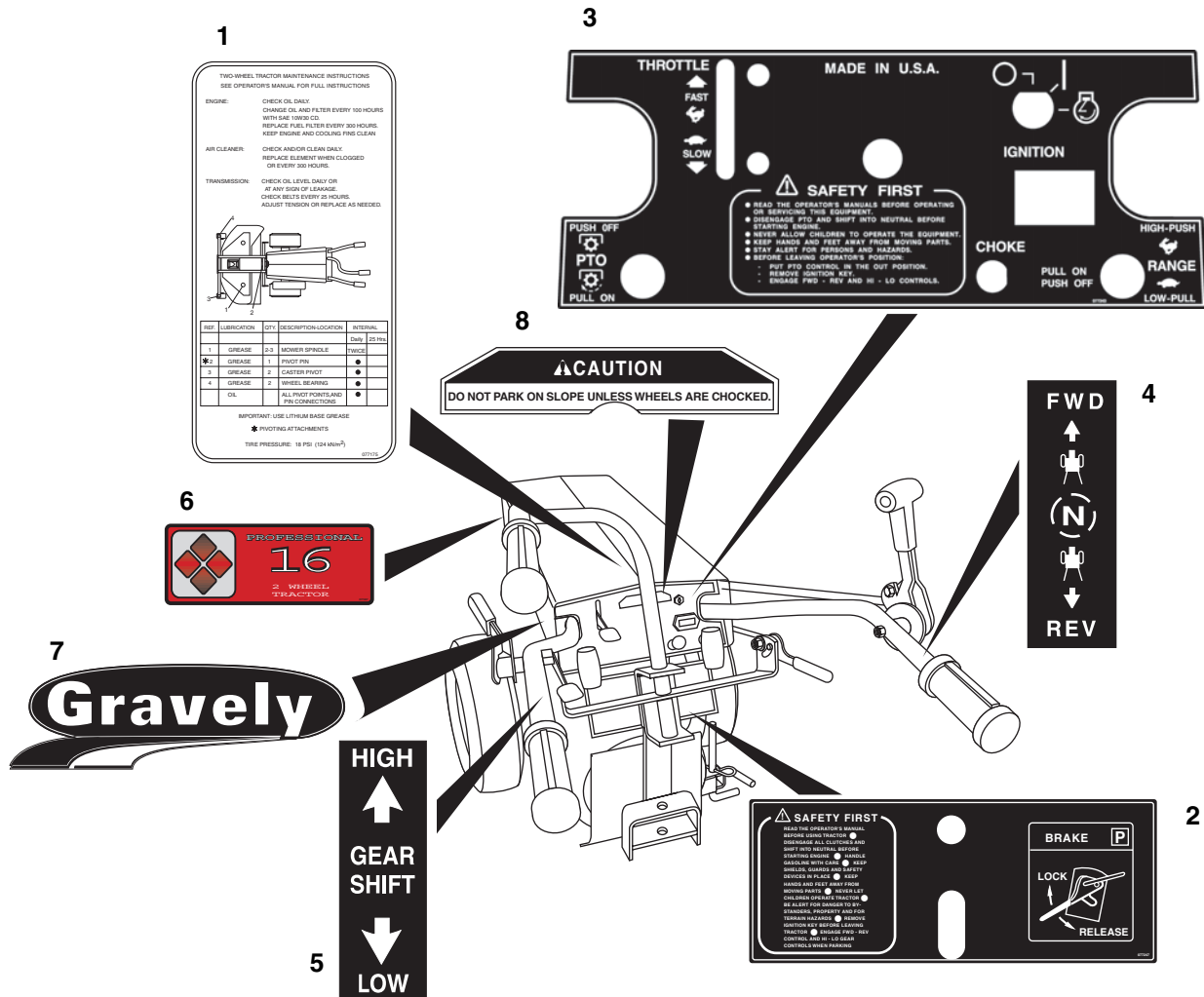
8.5 HP Robin	24
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DECALS

Model 985114

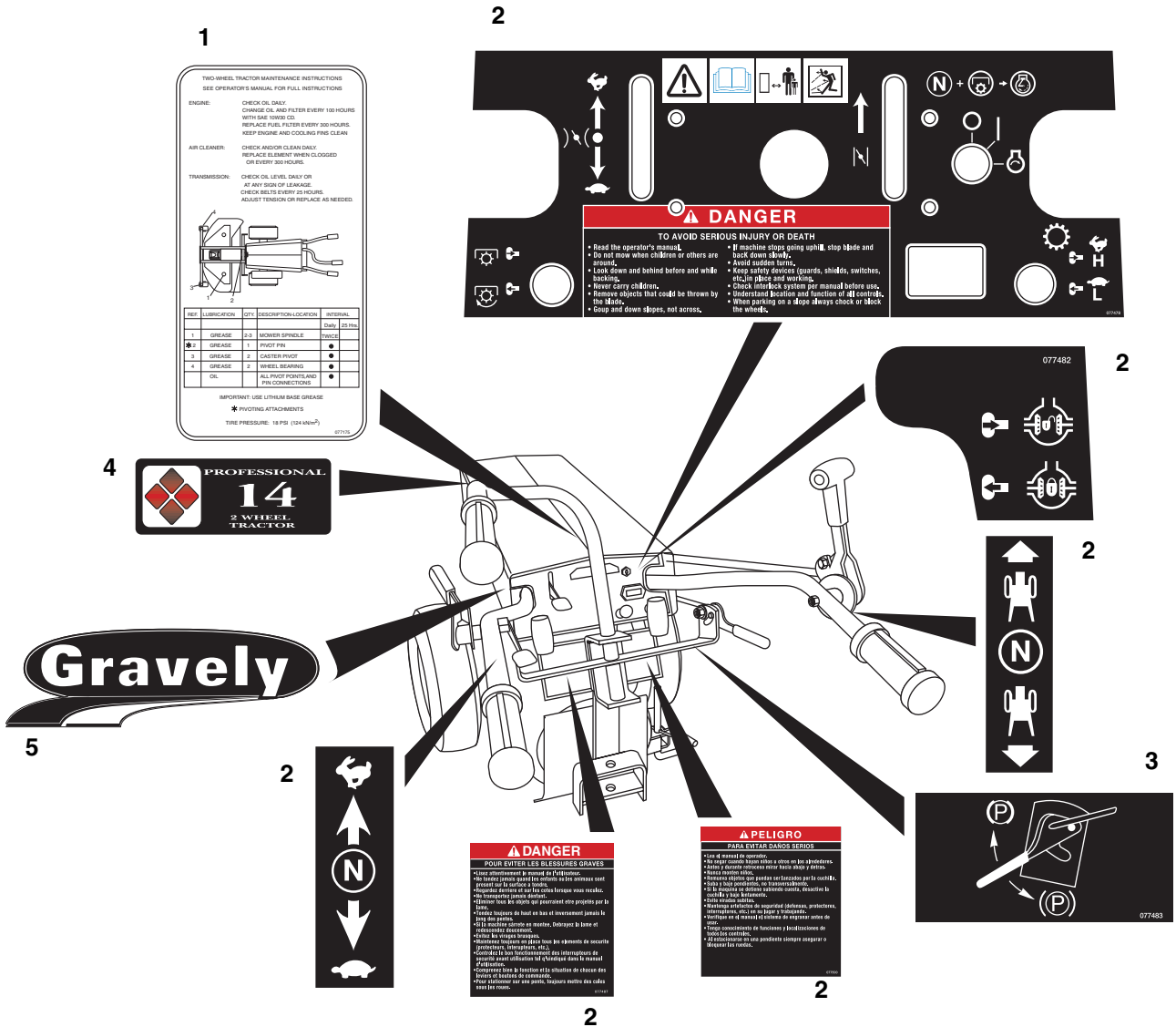


PH0034

Item	Part No.	Qty.	Description
1	07717500	1	Decal, 2 Wheel Maintenance
2	077247	1	Decal, 2 Wheel Instructions
3	07724300	1	Decal, Instrument Panel-2 Wheel Tractor
4	021090	1	Decal, Forward-Reverse
5	021091	1	Decal, Gear Shift
6	07740700	2	Decal, Gravely Professional 16
7	69201900	1	Decal Set Gravely Logo 17"
8	053168	1	Decal, Caution

DECALS

Model 985115, 117, 119, 307, 309, 311, 312, 313

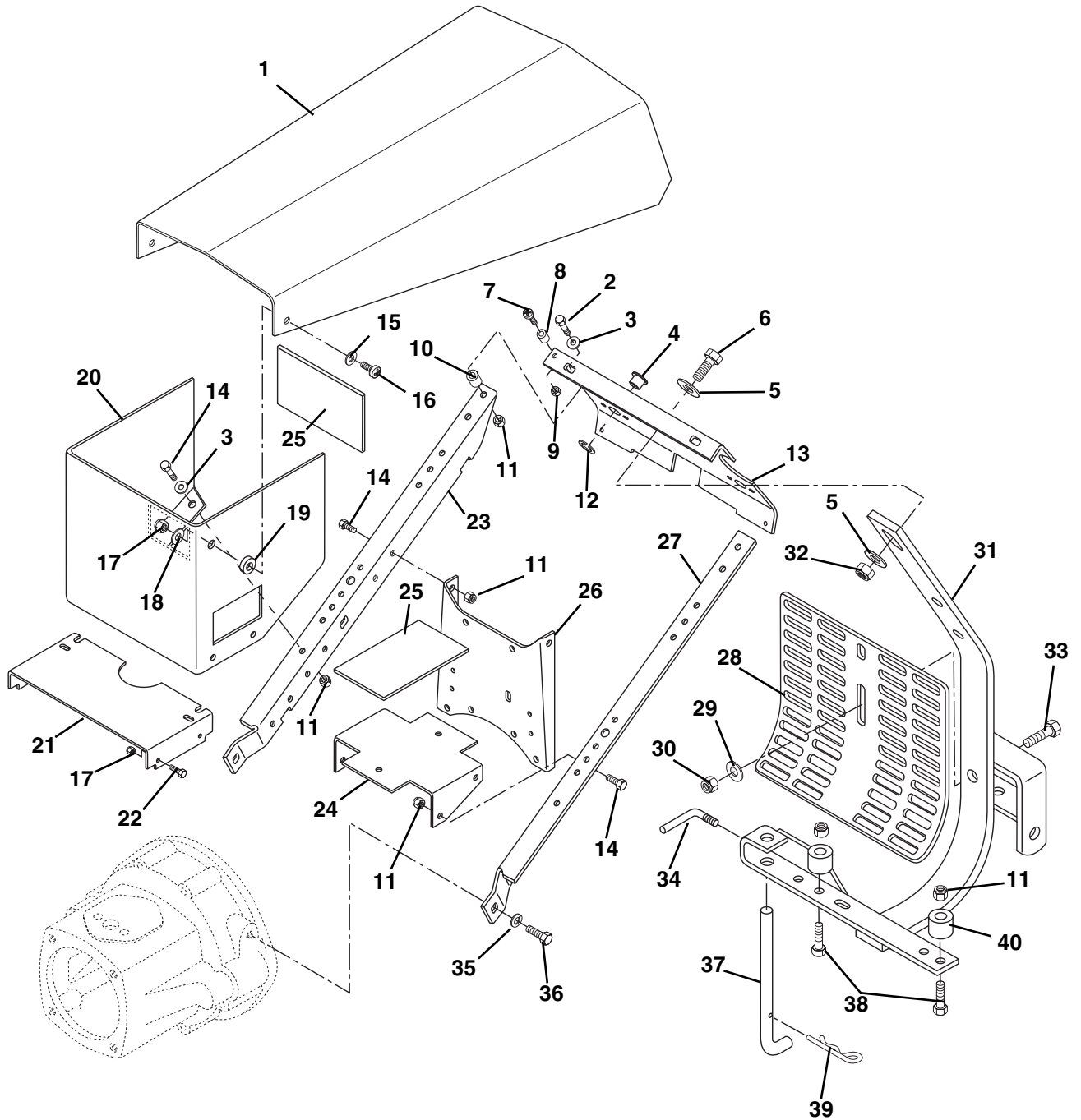


Item	Part No.	Qty.	Description
1	07717500	1	Decal, Two Wheel Maintenance
2	68516300	1	Decal Set, 2 Wheel Tractor
3	07748300	1	Decal, Parking Brake (117, 119, 309)
4	07740600	2	Decal, Professional 14 (117, 309, 311, 312)
	07740500	2	Decal, Professional 8 (115, 307)
	05359500	2	Decal, Professional 12 (119)
5	69201900	1	Decal Set Gravely Logo 17"

PH0044

FRAME

Model 985114, 115, 117, 119, 307, 309, 311, 312, 313



PH0391

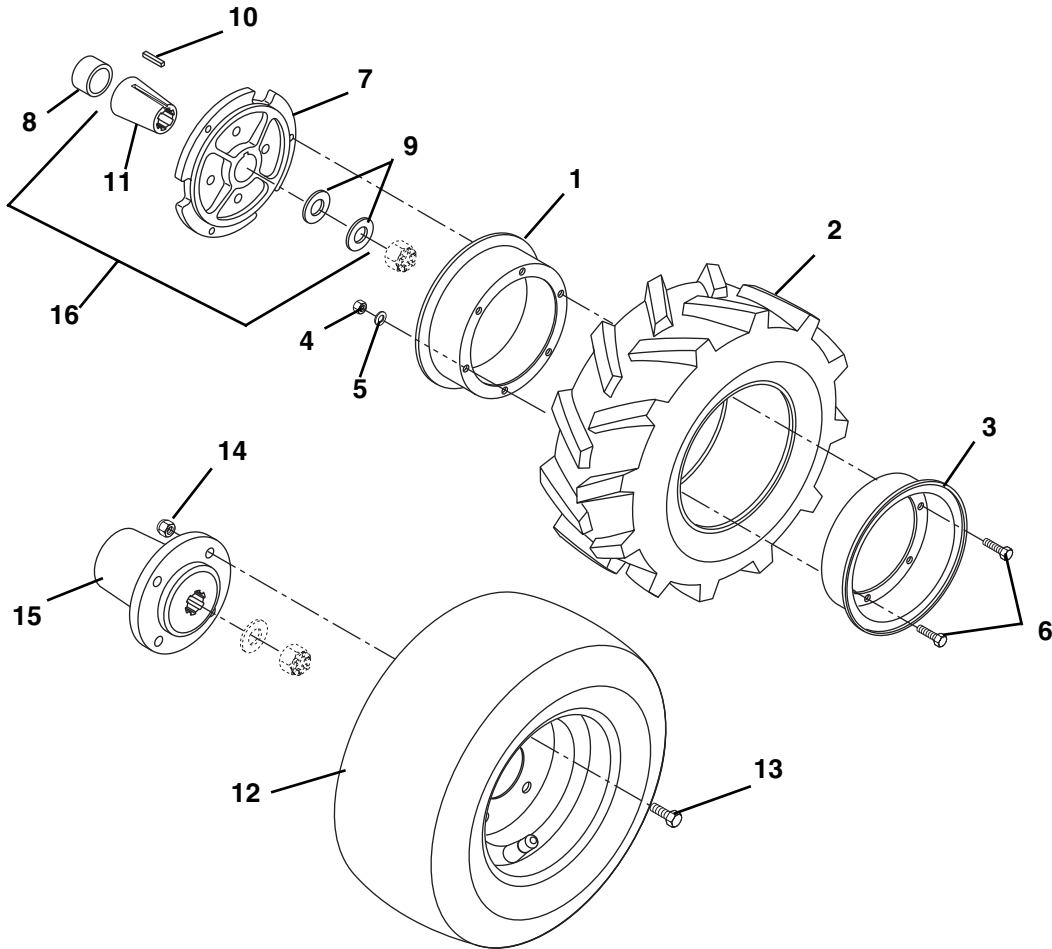
FRAME

Model 985114, 115, 117, 119, 307, 309, 311, 312, 313

Item	Part No.	Qty.	Description
1	040871	1	Hood 8 HP
2	05957900	2	Bolt-Hex .38-16 x 1.50 Grade 5
3	06436200	4	Washer-Flat-Steel .406 x .812 x .065
4	034738	1	Bushing-Flange .515 x .750 x .745 x 1.00
5	06442800	2	Washer-Flat-Steel .656 x 1.31 x .095
6	05968100	1	Bolt-Hex .625-11 x 2.00
7	06117900	4	Screw-Machine 6-32 x .75
8	018183	4	Bumper
9	06538900	4	Nut-Locking-Nylon 6-32
10	043922	2	Bushing
11	06529600	12	Nut-Locking-Center .375-16 Grade 2
12	034737	1	Ring-Retaining 1.000 x .748
13	044658	1	Plate, Instrument-Briggs Engine
	08574100	1	Plate, Instrument-Robin and Kohler Engines
14	05959400	8	Bolt-Hex .38-16 x .75
15	06437300	2	Washer-Flat-Steel .281 x .620 x .065
16	06118100	2	Screw-Machine .25-20 x 1
17	06529700	6	Nut-Locking-Center .25-20 Grade 2
18	06435700	2	Washer-Flat-Steel .38 x .875 x .085
19	041622	2	Bushing, Flange .280 x .750 x .318
20	046387	1	Support, Hood
21	08574400	1	Bracket, Battery Mount
22	106319	4	Bolt-Hex .25-20 x .63
23	046796	1	Support, Handle Bar Right Hand
24	046824	1	Bracket, Tank Support
25	041075	2	Pad, Gas Tank
26	046388	1	Bracket
27	046797	1	Support, Handle Bar Left Hand
28	047190	1	Guard, Engine
29	06442000	1	Washer-Flat-Steel .563 x 1.30 x .109
30	06536300	2	Nut-Locking-Center .50-13 Grade 5
31	047527	1	Weldment, Hitch
32	06536300	1	Nut-Locking-Center .625-11 Grade 2
33	05962000	2	Bolt-Hex .50-13 x 1.50 Grade 5
34	013457	1	Handle, Adjusting
35	06307300	2	Washer-Lock .50 x .125 Reg.
36	05947100	2	Bolt-Hex .50-13 x 1 Grade 5
37	034062	1	Stand, Kick
38	05963300	2	Bolt-Hex .38-16 x 2.00 Grade 5 (114)
	05958400	2	Bolt-Hex .38-16 x 2.50 Grade 5 (115, 117, 119, 307, 309, 311-313)
39	06714000	1	Pin-Hair-Internal .15 x 2.937
40	039760	2	Spacer

OPTIONAL WHEEL KITS

Model 985114, 115, 117, 119, 307, 309, 311, 312, 313

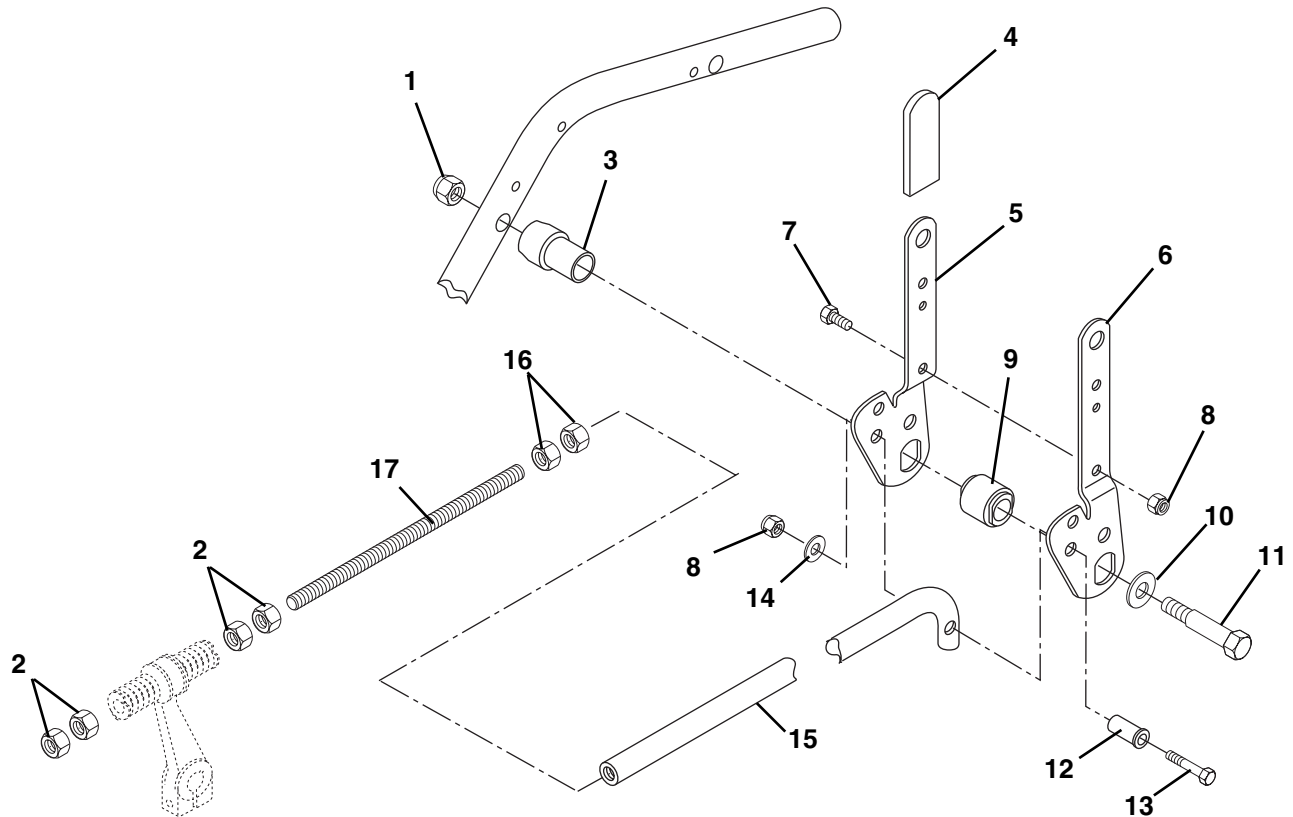


PH0193

Item	Part No.	Qty.	Description
1	012674	1	Wheel 7.71 x 1.25
2	018762	1	Tire 16 x 5W x 3
3	012673	1	Wheel-Disc 6.75 x 9.219
4	06529400	3	Nut-Hex .38-16
5	06308800	3	Washer-Lock .375 x .094
6	05959400	6	Bolt-Hex .38-16 x .75 Grade 5
7	08742753	1	Hub-Wheel
8	022512	1	Bushing-Sleeve 1.02 x 1.37 x 1.13
9	06439800	2	Washer-Flat-Steel .812 x 2.00 x .148
10	018345	1	Key-Square .249 x 1.25 x .248
11	038230	1	Insert-Hub
12	046987	1	Tire/Wheel Assembly 8.50-8 x 18
	07137700	1	Tire/Wheel Assembly 4.80/4.00-8
	07137800	1	Tire/Wheel 4.80/4.00-8 R.H.
	07138700	1	Tire/Wheel 4.80/4.00-8 L.H.
13	05962000	4	Bolt-Hex .50-13 x 1.50 Grade 5
14	06536300	4	Nut-Locking-Center .50-13 Grade 5
15	022551	1	Hub-7" Wheel
16	58501600	AR	Kit, Heavy Duty Hub (Contains Items 7, 9-11)

GEAR SHIFT CONTROL

Model 985114, 115, 117, 119, 307, 309, 311, 312, 313

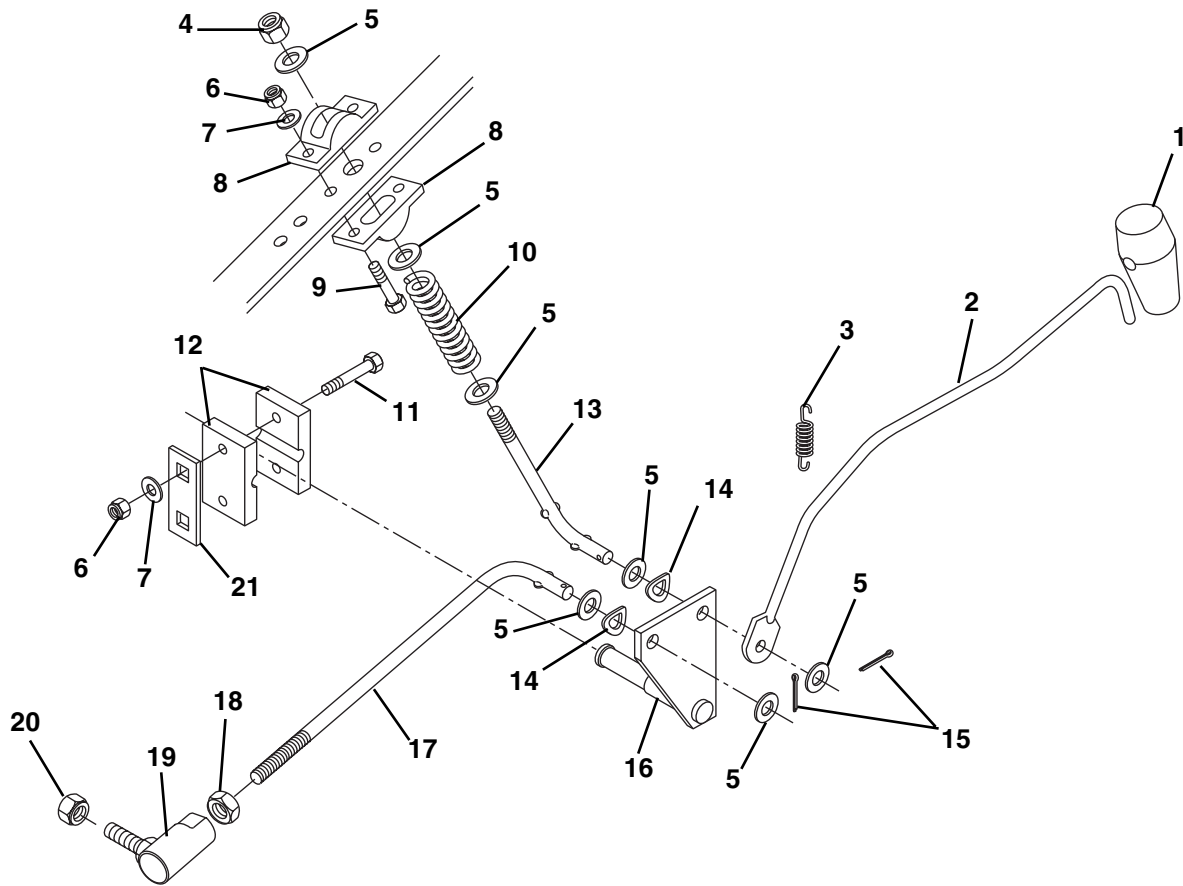


PH0380

Item	Part No.	Qty.	Description
1	06529600	1	Nut-Locking-Center .38-16
2	06535900	4	Nut-Jam .38-16
3	041614	1	Pivot-Hand Lever Left Hand
4	044139	1	Grip-Handle
5	041616	1	Handle-Control Right Hand
6	041615	1	Handle-Control Left Hand
7	106319	1	Bolt-Hex .25-20 x .62
8	06529700	2	Nut-Locking-Center .250-20 Grade 2
9	041594	1	Bushing Flange .751 x 1.13 x 1.07
10	06441900	1	Washer-Flat-Steel .531 x 1.062 x .095
11	047566	1	Bolt-Hex .38-16 x 3.75
12	041244	1	Bushing-Flange .257 x .38 x 1.080
13	05952500	1	Bolt-Hex .25-20 x 1.50 Grade 5
14	06437300	1	Washer-Flat-Steel .281 x .620 x .065
15	045575	1	Rod-Control Hi-Lo
16	06529400	2	Nut-Hex .375-16 Grade 2
17	045577	1	Rod-Extension

PTO CONTROL

Model 985114, 115, 117, 119, 307, 309, 311, 312, 313

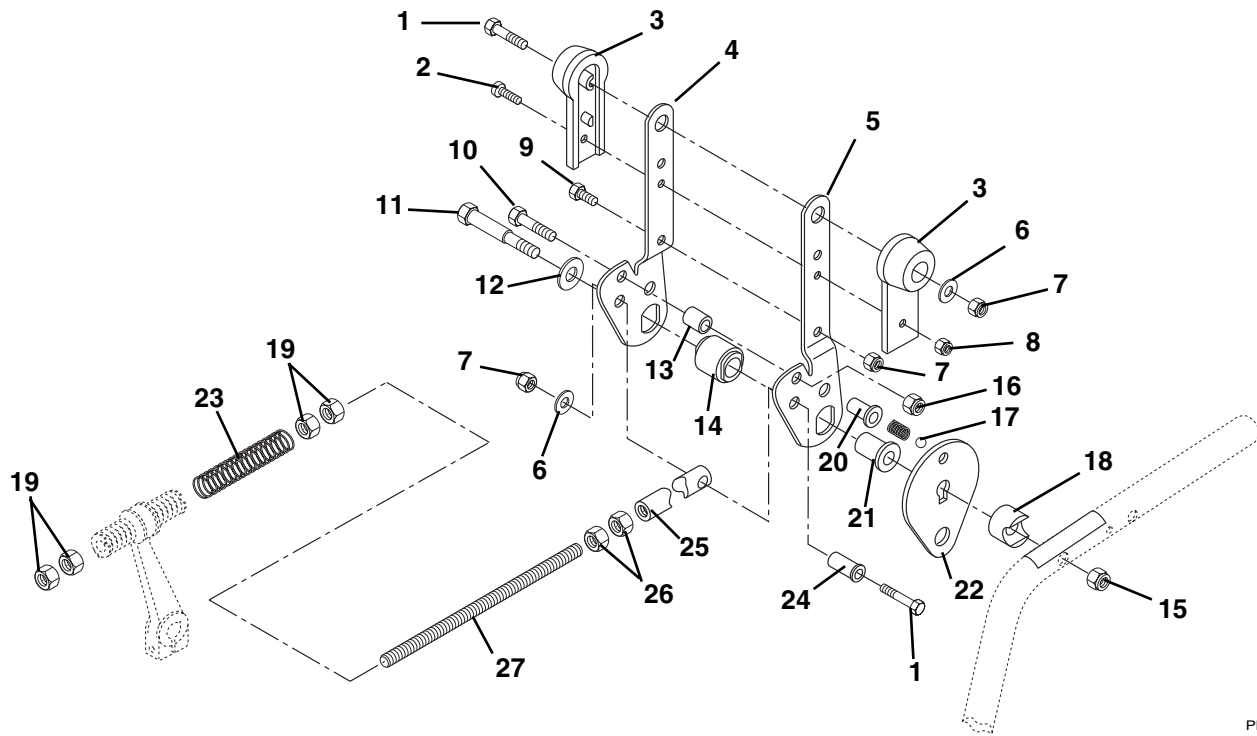


PH0051

Item	Part No.	Qty.	Description
1	010683	1	Handle-Rubber Shifter
2	046798	1	Rod-Shifter
3	041042	1	Spring-Tension .041 x 1.25 x .50
4	06529600	1	Nut-Locking-Center .375-16 Grade 2
5	06436200	8	Washer-Flat-Steel .406 x .812 x .065
6	06529700	4	Nut-Locking-Center .250-20 Grade 2
7	06437300	4	Washer-Flat-Steel .281 x .620 x .065
8	040637	2	Cam-Shifter
9	05947700	2	Bolt-Hex .25-20 x 1.00 Grade 5
10	040599	1	Spring-Compression .081 x .720 x 2.75
11	05952500	2	Bolt-Hex .25-20 x 1.50 Grade 5
12	032353	2	Block-Shift Lever
13	046784	1	Link-Shifter Stop
14	039078	2	Spring Washer
15	06707300	2	Pin-Cotter .12 x .75
16	040849	1	Weldment, PTO Bellcrank
17	08573000	1	Rod-PTO
18	120369	1	Nut-Hex .375-24 Grade 2
19	02917100	1	Ball Joint
20	06538800	1	Nut-Locking Nylon .375-24 with Insert
21	021462	1	Shim-Mower Height Adjuster Bracket

DIRECTION CONTROL

Model 985114, 115, 117, 119, 307, 309, 311, 312, 313



PH0150

Item	Part No.	Qty.	Description
1	05952500	2	Bolt-Hex .25-20 x 1.50 Grade 5
2	06117900	1	Screw-Machine 6-32 x .75
3	041252	2	Knob-Handle Control
4	040601	1	Handle-Control Right Hand
5	040600	1	Handle-Control Left Hand
6	06437300	2	Washer-Flat-Steel .281 x .620 x .065
7	06529700	3	Nut-Locking-Center .250-20 Grade 2
8	06538900	1	Nut-Locking-Nylon 6-32
9	106319	1	Bolt-Hex .25-20 x .63
10	05957900	1	Bolt-Hex .38-16 x 1.50 Grade 5
11	047566	1	Bolt-Hex .38-16 x 3.5
12	06441900	1	Washer-Flat-Steel .531 x 1.062 x .095
13	041593	1	Sleeve-Handle Stop
14	041594	1	Bushing Flange .751 x 1.13 x 1.07
15	06529600	2	Nut-Locking-Center .38-16
16	012586	1	Spring-Compression .038 x .281 x .88
17	274301	1	Ball .312 Guard 2000
18	042170	1	Bracket-Handle Pivot
19	06535900	4	Nut-Jam .375-16
20	044361	1	Bushing-Flange .320 x .750 x 1.280
21	042169	1	Bushing-Flange .515 x .746 x 1.290 x 1.000
22	044362	1	Plate-Neutral
23	021506	1	Spring-Compression .072 x .561 x 2.50
24	041244	1	Bushing-Flange .257 x .38 x 1.080
25	045576	1	Rod-Control Forward Reverse
26	06529400	2	Nut-Hex .375-16 Grade 2
27	045577	1	Rod-Extension

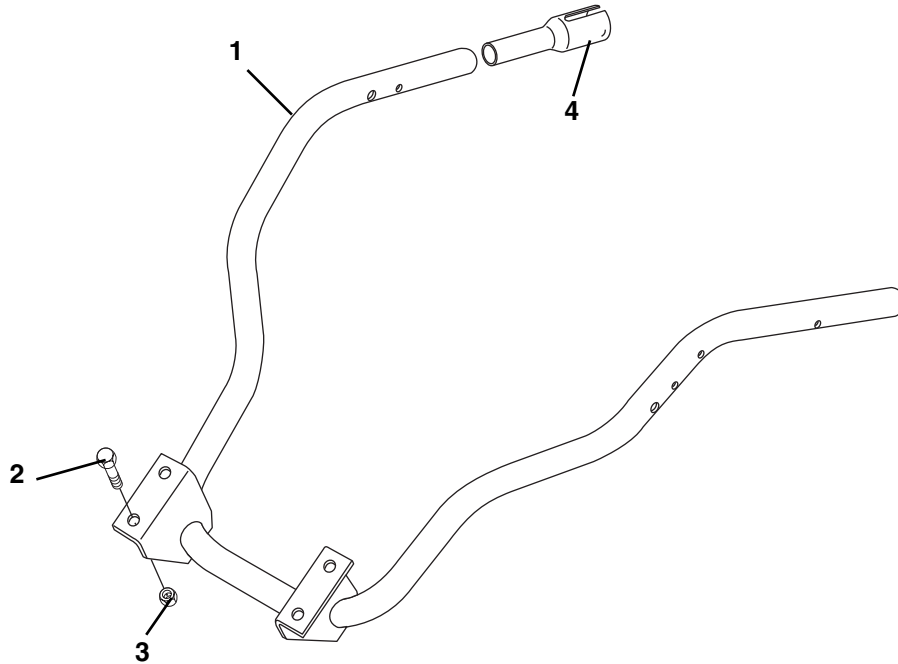
STEERING BRAKES

Model 985114, 117, 119, 309

Item	Part No.	Qty.	Description
1	049731	1	Rod-Brake Right Hand
2	06224200	1	Bolt-Round Head Square Neck .38-16 x 1.50
3	023391	1	Handle-Parking Brake
4	020775	3	Washer-Flat-Nylon .375 x .75 x .060
5	023394	1	Washer-Rubber .375 x .75 x .125
6	06436200	12	Washer-Flat-Steel .406 x .812 x .065
7	06529600	1	Nut-Locking-Center .38-16 Grade 2
8	047160	1	Weldment-Brake Handle
9	273921	1	Pin-Roll .313 x 2.00
10	044347	1	Grip-Brake Handle
11	047070	2	Bushing-Flange 1.082 x 1.385 x .870 x 1.750
12	05959700	2	Bolt-Hex .50-13 x 2.00 Grade 5
13	041850	1	Bracket-Brake Handle
14	06712800	1	Pin-Cotter .188 x 1.50
15	06445300	1	Washer-Flat-Steel 1.120 x 1.500 x .092
16	06536300	2	Nut-Locking-Center .50-13 Grade 5
17	585010	1	Plate-Instruction
18	041851	1	Bracket-Brake Handle
19	049732	1	Rod-Brake Left Hand
20	431780	2	Pin-Clevis 3/8 x .750
21	06535900	8	Nut-Jam .375-16
22	023392	1	Spring-Compression .105 x .61 x 2.50
23	023389	2	Bracket-Adjustment
24	06706900	4	Pin-Cotter .09 x .75
25	023384	2	Brake 7 x 1-3/4 Mechanical
26	05959400	8	Bolt-Hex .380-16 x .75
27	04903400	2	Drum, Brake
28	023388	1	Rod-Brake Link
29	036372	2	Ring-Retaining-External .625 x .042
30	06442800	2	Washer-Flat-Steel .656 x 1.312 x .095
31	023387	1	Plate-Pivot
32	041847	1	Stud-Pivot
33	06307300	1	Washer-Lock .125 Reg.
34	06536700	2	Nut-Jam .312-24 Grade 2
35	06308600	2	Washer-Lock .313 x .078
36	023509	4	Spring-Shoe Ret Box
37	023505	2	Arm-Cam Lever
38	05968000	2	Bolt-Hex .31-24 x 1.75
39	023507	2	Plate-Back
40	023506	2	Cam-Brake
41	023539	2	Kit-Brake Shoe
42	023508	2	Spring-Shoe Return

HANDLEBARS

Model 985114, 115, 117, 119, 307, 309, 311, 312, 313

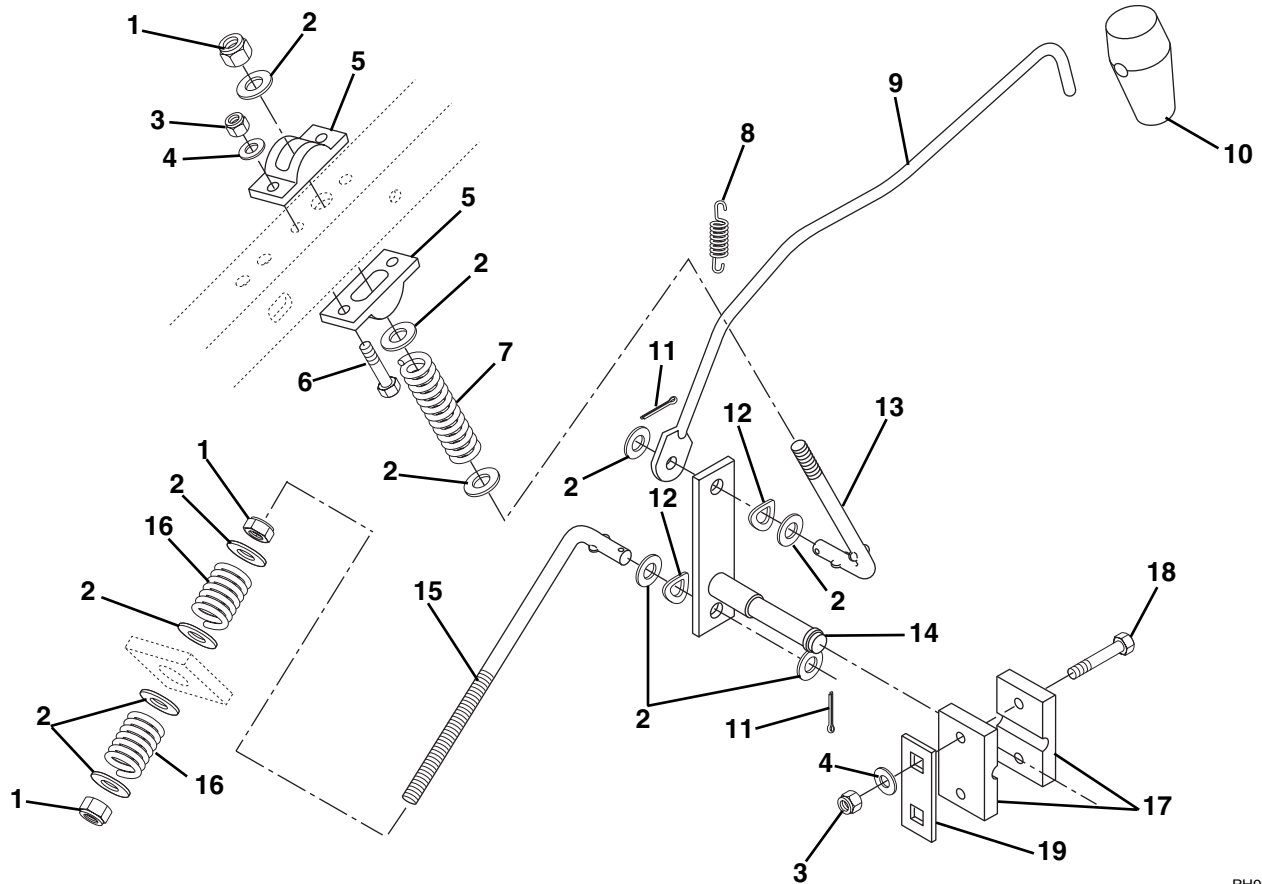


PH0070

Item	Part No.	Qty.	Description
1	047162	1	Weldment-Handlebar
2	05958000	4	Bolt-Hex .38-16 x 1.25 Grade 8
3	06529600	4	Nut-Locking-Center .375-16
4	08855200	2	Insert-Handlebar

RANGE/DIFFERENTIAL LOCK CONTROL - 4 SPEED

Model 985114, 115, 117, 119, 307, 309, 311, 312, 313

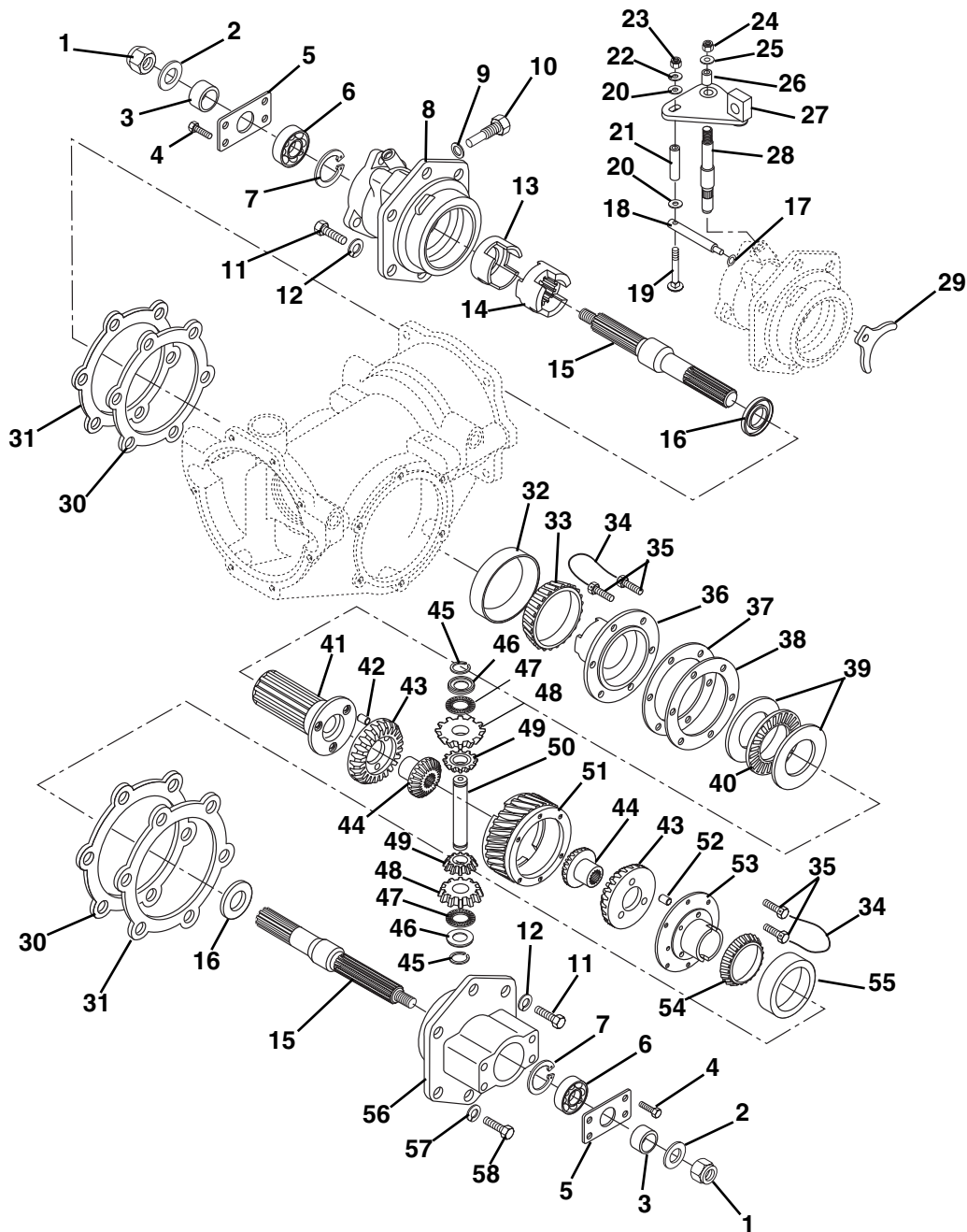


PH0241

Item	Part No.	Qty.	Description
1	06529600	3	Nut-Locking-Center .375-16 Grade 2
2	06436200	11	Washer-Flat-Steel .406 x .812 x .065
3	06529700	4	Nut-Locking-Center .250-20 Grade 2
4	06437300	4	Washer-Flat-Steel .281 x .620 x .065
5	040637	2	Cam-Shifter
6	05947700	22	Bolt-Hex .25-20 x 1.00 Grade 5
7	040599	1	Spring-Compression .081 x .720 x 2.75
8	041042	1	Spring-Tension .041 x 1.25 x .50
9	046798	1	Rod-Shifter
10	010683	1	Handle-Rubber Shifter
11	177923	2	Pin-Cotter .12 x .75
12	039078	2	Spring Washer
13	046784	1	Link-Shifter Stop
14	040632	1	Weldment-Shifter Crank
15	040648	1	Link-Shifter
16	011779	2	Spring-Compression .125 x .78 x 1.00
17	032353	2	Block-Shift Lever
18	05952500	2	Bolt-Hex .25-20 x 1.50 Grade 5
19	021462	1	Shim-Mower Height Adjuster Bracket

SWIFTAMATIC DIFFERENTIAL - 4 SPEED

Model 985114, 115, 117, 119, 307, 309, 311, 312, 313



PH0210

Item	Part No.	Qty.	Description
1	06537900	2	Nut-Locking-Jam-Nylon .75-10
2	06439000	2	Washer-Flat .812 x 1.50 x .135
3	022501	2	Spacer 1.008 x 1.377 x .509
4	05959400	8	Bolt-Hex .38-16 x .75 Grade 5
5	022503	2	Plate, End
6	032050	2	Bearing-Ball 1.0 x 2.0 x .56
7	022497	2	Ring-Retaining-Internal 2.210 x .062
8	022494	1	Housing, Axle, 2 Speed

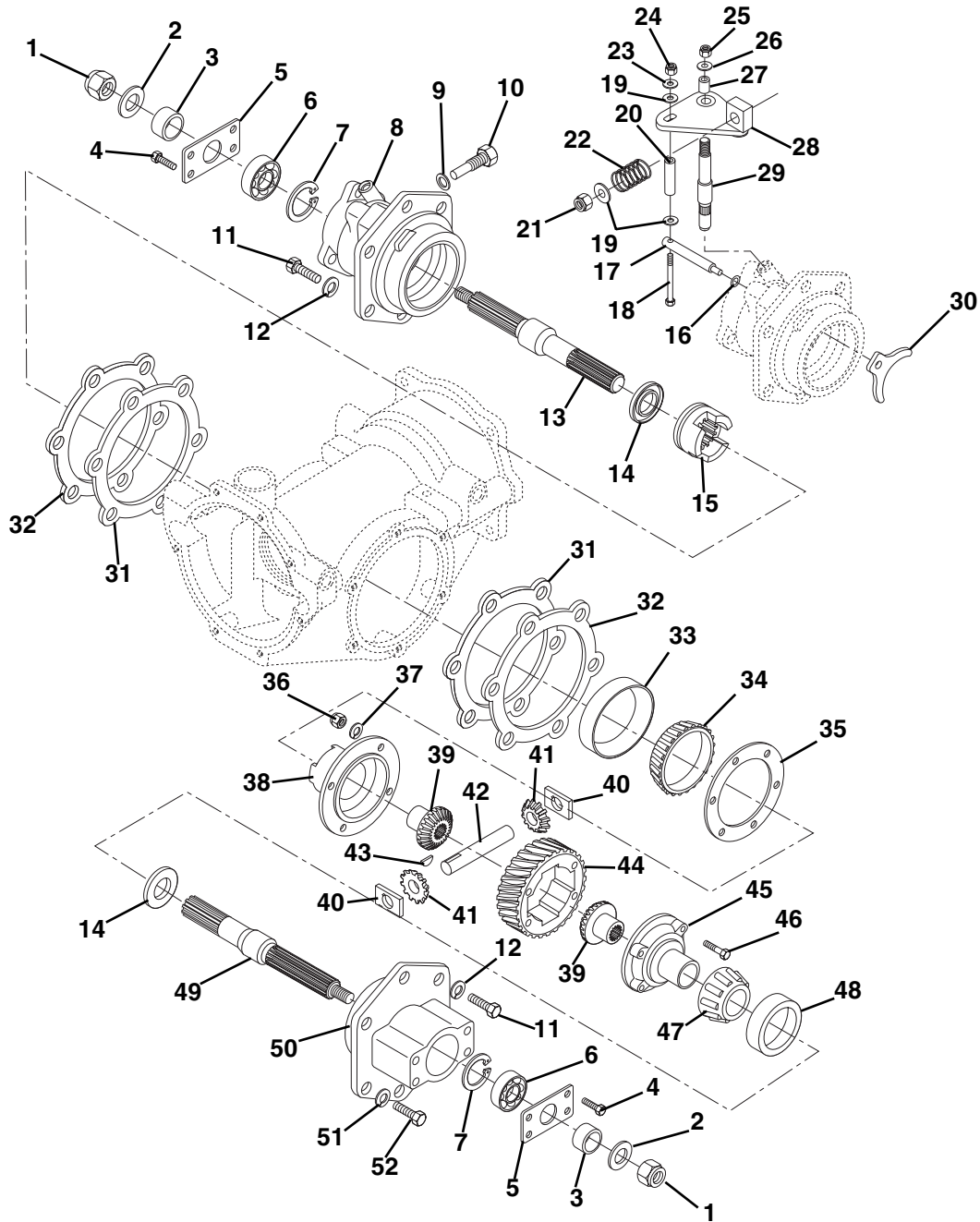
SWIFTAMATIC DIFFERENTIAL - 4 SPEED

Model 985114, 115, 117, 119, 307, 309, 311, 312, 313

Item	Part No.	Qty.	Description
9	012707	1	Washer-Nut .63 x .875 x .062
10	006734	1	Bolt-Hex .62-18 x .493 x 1.25
11	05947100	11	Bolt-Hex .50-13 x 1 Grade 5
12	06307300	8	Washer-Lock .50 x .125
13	011156	1	Clutch, Stationary
14	011632	1	Clutch, Shifting
15	022493	2	Axle, Straight
16	022506	2	Seal 1.1988 x 2.00 x .250
17	006732	1	O-Ring .437 x .625 x .093
18	006721	1	Pin-Clutch Sliding
19	05952700	1	Bolt-Round Head Square Neck .25-20 x 2.25 Grade 8
20	06436200	2	Washer-Flat-Steel .406 x .812 x .065
21	024382	1	Bushing-Sleeve .277 x .375 x 1.37
22	06437300	1	Washer-Flat-Steel .281 x .625 x .065
23	06529700	1	Nut-Locking-Center .250-20 Grade 2
24	06529800	1	Nut-Locking-Center .312-18 Grade 2
25	06437200	1	Washer-Flat-Steel .344 x .688 x .065
26	006724	1	Bushing-Sleeve .377 x .503 x .88
27	006723	1	Weldment, Arm Shifter
28	010505	1	Pivot, Stationary
29	006719	1	Yoke, Shifting
30	012597	AR	Gasket, Axle Housing
31	012595	AR	Assembly, Advance Casting
32	012500	1	Bearing-Race 4.34 x .741
33	012501	1	Bearing-Cone 2.69 x .87
34	018605	6	Wire, Bolt
35	018604	12	Bolt-Special .31-18 x .75
36	022496	1	Housing, Clutch
37	006740	1	Shim, .020 Clutch Worm Gear
38	006739	3	Shim, .005 Clutch Worm Gear
39	022500	2	Washer-Thrust 2.002 x 2.740 x .031
40	006743	1	Bearing-Needle-Thrust 2.0 x 2.74 x .010
41	022498	1	Shifter, Splined Pinned
42	034644	3	Pin-Dowel .375 x .375
43	006703	2	Gear, Pinned Bevel
44	006709	2	Gear, Differential Bevel
45	015733	2	Ring-Retaining .697 x .93
46	015734	2	Bushing, Flange .761 x 1.24 x 1.24
47	006741	2	Bearing-Needle-Thrust .754 x 1.24 x .078
48	006702	2	Gear, Differential Shifting Bevel
49	006708	2	Gear, Spider Bevel
50	022499	1	Pin, Spider
51	015729	1	Gear, Worm 8 Start
52	006714	3	Pin-Dowel .38 x .500
53	012126	1	Housing, Pinned
54	012131	1	Cone, Roller Bearing 50mm x 21.5mm
55	012130	1	Cup, Roller Bearing 82mm x 17mm
56	022495	1	Housing, Axle
57	045280	1	Seal-Oil Drain .563 x 1.250 x .091
58	05958900	1	Bolt-Hex .50-13 x 1.25 Grade 5

LOCKING DIFFERENTIAL - 2 SPEED

Model 985114, 115, 117, 119, 307, 309, 311, 312, 313



PH0430

Item	Part No.	Qty.	Description
1	06537900	2	Nut-Locking-Jam-Nylon .75-10
2	06439000	2	Washer-Flat .812 x 1.469 x .134
3	022501	2	Bushing-Sleeve 1.02 x 1.37 x 1.37
4	05959400	8	Bolt-Hex .38-16 x .75 Grade 5
5	022503	2	Plate-End
6	032050	2	Bearing-Ball 1.0 x 2.0 x .56
7	022497	2	Ring-Retaining-Internal 2.210 x .062
8	022494	1	Housing-Axle-2 Speed
9	012707	1	Washer-Nut .63 x .875 x .062

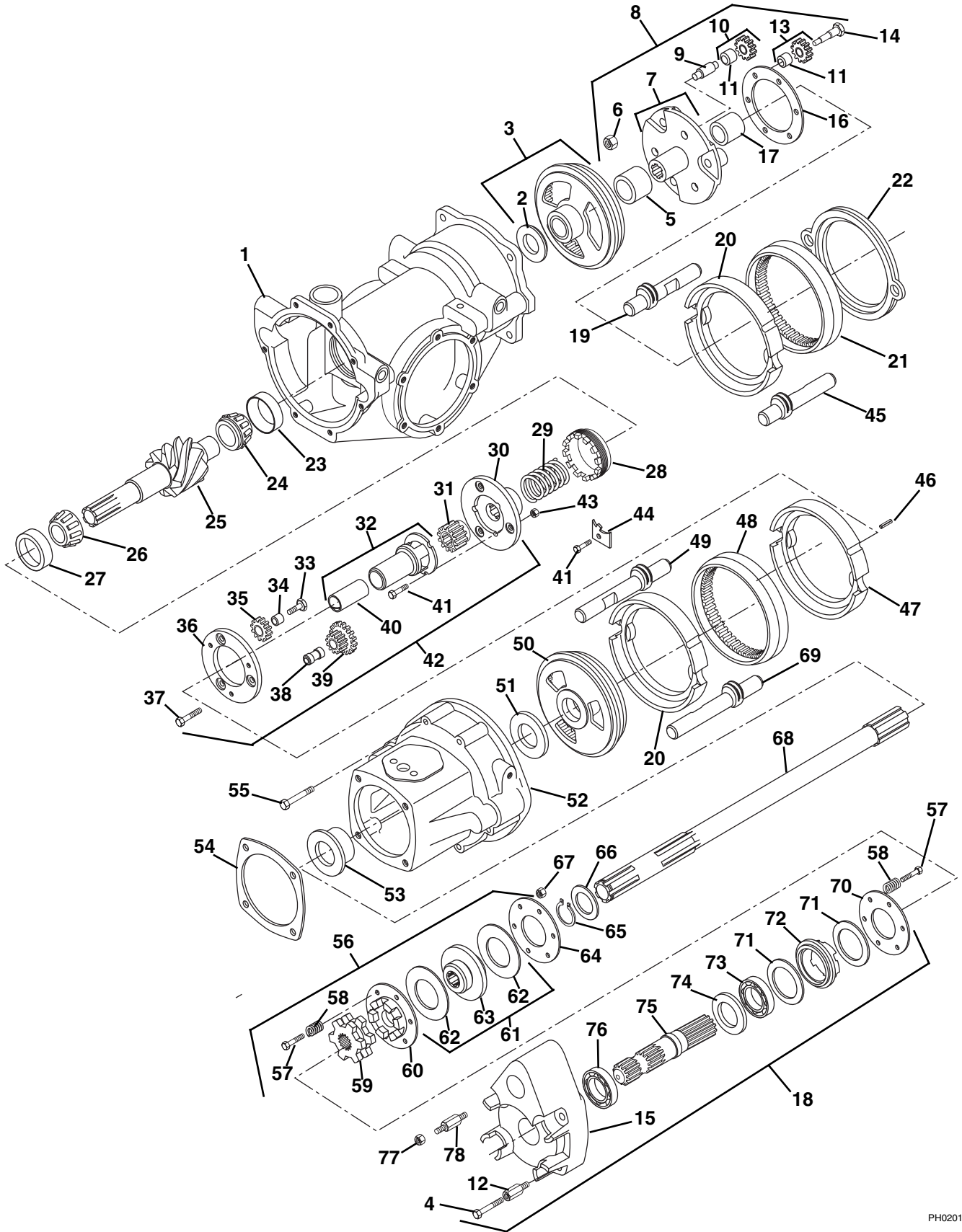
LOCKING DIFFERENTIAL - 2 SPEED

Model 985114, 115, 117, 119, 307, 309, 311, 312, 313

Item	Part No.	Qty.	Description
10	006734	1	Bolt-Hex .62-18 x .493 x 1.25
11	05947100	11	Bolt-Hex .50-13 x 1 Grade 5
12	06307300	8	Washer-Locking .50
13	041064	1	Axle-Straight Differential Locking
14	022506	2	Seal 1.188 x 2.000 x .250
15	041063	1	Clutch-Sliding Differential Locking
16	006732	1	O-Ring .437 x .625 x .093
17	006721	1	Pin-Clutch Sliding
18	05952700	1	Bolt-Round Head Square Neck .25-20 x 2.25
19	06436200	4	Washer-Flat-Steel .406 x .812 x .065
20	024382	1	Bushing-Sleeve .277 x .375 x 1.37
21	06535800	1	Nut-Locking-Nylon .375-16
22	010682	1	Spring-Compression .067 x .72 x 2.0
23	06437200	1	Washer-Flat-Steel .281 x .62 x .065
24	06531000	1	Nut-Locking-Nylon .250-20
25	06530200	1	Nut-Locking-Nylon .312-18
26	06437200	1	Washer-Flat-Steel .344 x .688 x .065
27	006724	1	Bushing-Sleeve .377 x .503 x .88
28	006723	1	Weldment-Arm Shifter
29	010505	1	Pivot-Stationary
30	006719	1	Yoke-Shifting
31	012597	AR	Gasket-Axle Housing
32	012595	AR	Shim-Axle Housing
33	012500	1	Bearing-Race 4.34 x .741
34	012501	1	Bearing-Cone 2.69 x .87
35	006739	2	Shim .005 Clutch Worm Gear
36	120368	4	Nut-Hex .312-24
37	06310500	4	Washer-Locking-Internal .313 x .030
38	041065	1	Housing-Differential Locking
39	006709	2	Gear-Differential Bevel
40	022505	2	Block-Drive
41	006708	2	Gear-Spider Bevel
42	012556	1	Pin-Spider Pinion
43	271089	1	Key-Woodruff .13 x .38
44	013497	1	Gear-4 Lead Worm
45	022504	1	Housing-Differential
46	181623	4	Bolt-Hex .31-24 x 2.75
47	012131	1	Cone-Roller Bearing 50mm x 21.5mm
48	012130	1	Cup-Roller Beaing 82mm x 17mm
49	022493	1	Axle Straight
50	022495	1	Housing Axle
51	045280	1	Seal-Oil Drain .563 x 1.250 x .091
52	013624	1	Bolt-Hex .50-13 x 1.312 Grade 5

TRANSMISSION

Model 985114, 115, 117, 119, 307, 309, 311, 312, 313



PH0201

TRANSMISSION

Model 985114, 115, 117, 119, 307, 309, 311, 312, 313

Item	Part No.	Qty.	Description
1	010628	1	Transmission Housing
2	012645	1	Plate-Rear Thrust
3	011168	1	Assembly-Ring Gear & Bushing (Includes Item 2)
4	05947100	2	Bolt-Hex .50-13 x 1 Grade 5
5	011169	1	Bushing-Sleeve 1.125 x 1.502 x 1.312
6	07051500	3	Nut-Locking .312-18 x .265
7	011171	1	Assembly-Planet Gear Carrier
8	014615	1	Assembly-Hi-Lo Planetary
9	011174	3	Pin-Hi-Lo Orbit Gear
10	011175	3	Assembly-Internal Orbit Gear (Includes Item 11)
11	011177	6	Bushing-Sleeve .500 x .627 x .465
12	022479	2	Stud-Quick Hitch
13	011179	3	Assembly-External Orbit Gear (Includes Item 11)
14	011181	3	Bolt-Orbit Gear
15	042645	1	Casting-Quick Hitch
16	011178	1	Spacer-Pin
17	011172	1	Bushing-Sleeve .737 x .877 x .683
18	044279	1	Quick Hitch Assembly
19	043278	1	Rod-Rear Right Hand Clutch Slide
20	012644	2	Assembly-Clutch Cup
21	011182	1	Gear-Rear Ring
22	011183	1	Spacer-Rear
23	010390	1	Bearing-Cup 2.328 x .465
24	010389	1	Bearing-Cone 1.25 x .66
25	021243	1	Weldment-8-Lead Worm (114, 115, 117, 119, 307, 309, 312)
	021241	1	Weldment-4-Lead Worm (311, 313)
26	012332	1	Bearing-Cone 1.250 x 2.875
27	012333	1	Bearing-Cup 2.875 x .688
28	012635	1	Nut-Bearing 3.00 - 16
29	012663	1	Spring-Compression .188 x 1.66 x 2.0
30	012633	1	Plate-Front Pin
31	012637	1	Gear-Sun Pinion Spur
32	014925	1	Assembly-Quill and Bushing (Includes Item 40)
33	012658	3	Bolt .38-24 x .860
34	012657	3	Spacer .375 x .686 x .516)
35	012656	3	Gear-Reverse Idler Spur
36	012655	1	Spacer-Front Pin
37	012643	3	Bolt-Spacer .38-16 x 1.81
38	012640	3	Pin-Forward Reverse Orbit Gear Steel
39	012639	3	Gear-Orbit Spur
40	012662	1	Bushing-Sleeve .875 x 1.002 x 2.015
41	106319	4	Bolt-Hex .25-20 x .63
42	014922	1	Assembly-Forward Reverse Planetary (Includes Items 30-41)
43	06533200	3	Nut-Hex .250-20 Grade 2
44	012648	1	Nut-Adjusting
45	043277	1	Rod-Rear Left Hand Clutch Slide
46	013456	1	Pin-Roll .368 x .500
47	012636	1	Cup-Gear
48	012632	1	Internal Spur
49	043275	1	Rod-Left Hand Clutch Slide

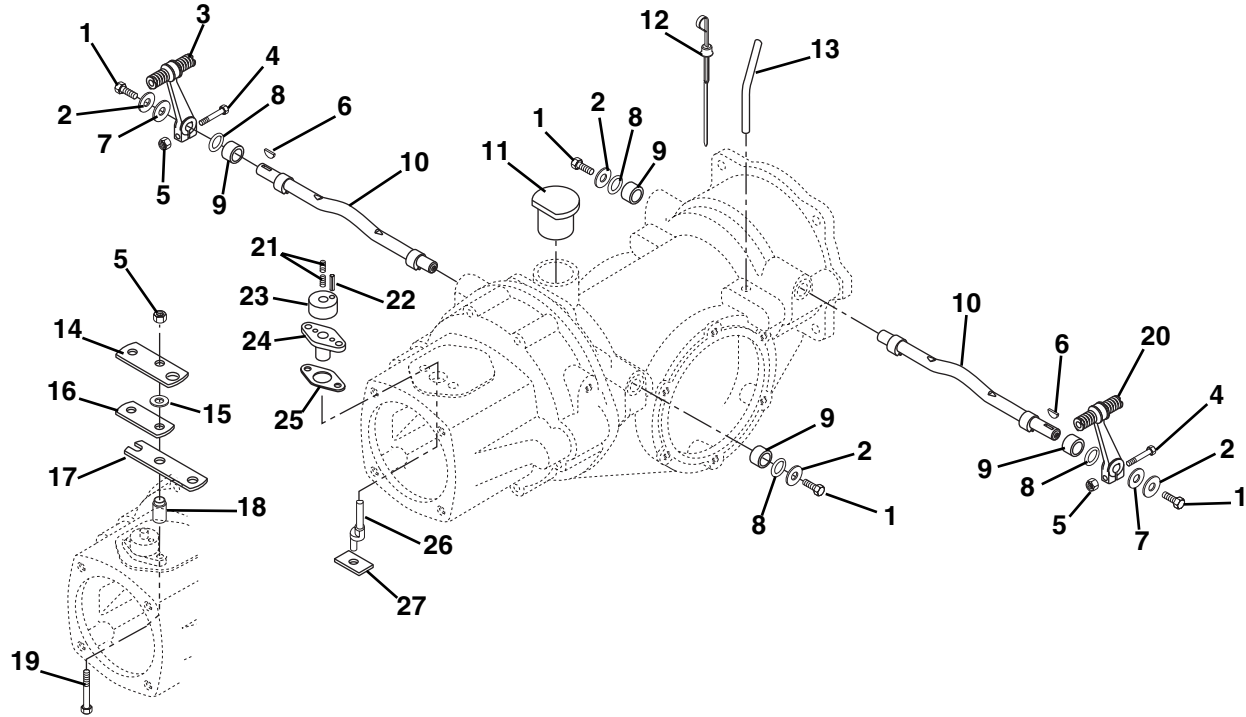
TRANSMISSION

Model 985114, 115, 117, 119, 307, 309, 311, 312, 313

Item	Part No.	Qty.	Description
50	012654	1	Cone-Reverse Gear
51	037820	1	Disk-Friction
52	044957	1	Assembly-Advance Casting
53	044947	1	Bushing-Flange 1.375 x 1.628 x .957 x 2.125
54	005056	1	Gasket-Attachment
55	05967900	6	Bolt-Hex .31-18 x 3.25 Grade 8
56	044278	AR	Assembly-Clutch (Includes Items 57, 58, 60, 62, 63, 64 & 67)
57	05968000	12	Bolt-Hex .31-24 x 1.75
58	012871	12	Spring-Compression .156 x .343 x .75
59	045422	1	Dog
60	012867	1	Plate-Dog
61	58501300	AR	Assembly-PTO Clutch Friction Plate (Includes Items 62 & 63)
62	08568500	2	Washer-Friction
63	044946	1	Plate-Drive
64	012868	1	Plate-Back
65	05702600	1	Ring-Retaining-External .875 x .042
66	021541	1	Washer-Thrust .877 x 1.427 x .032
67	06536700	6	Nut-Jam .312-24
68	044645	1	Shaft-Pinion
69	043276	1	Rod-Right Hand Clutch Slide
70	043876	1	Plate-Back
71	043877	2	Disc-Brake
72	043879	1	Brake-Dog Plate
73	021929	1	Bearing-Ball .984 x 2.047 x .591
74	043882	1	Seal 1.102 x 2.047 x .315
75	043875	1	Shaft-Quick Hitch
76	019072	1	Bearing-Ball .984 x 2.04 x .59
77	06537300	2	Nut .50-13
78	024824	2	Stud-Quick Hitch

TRANSMISSION (CONT.)

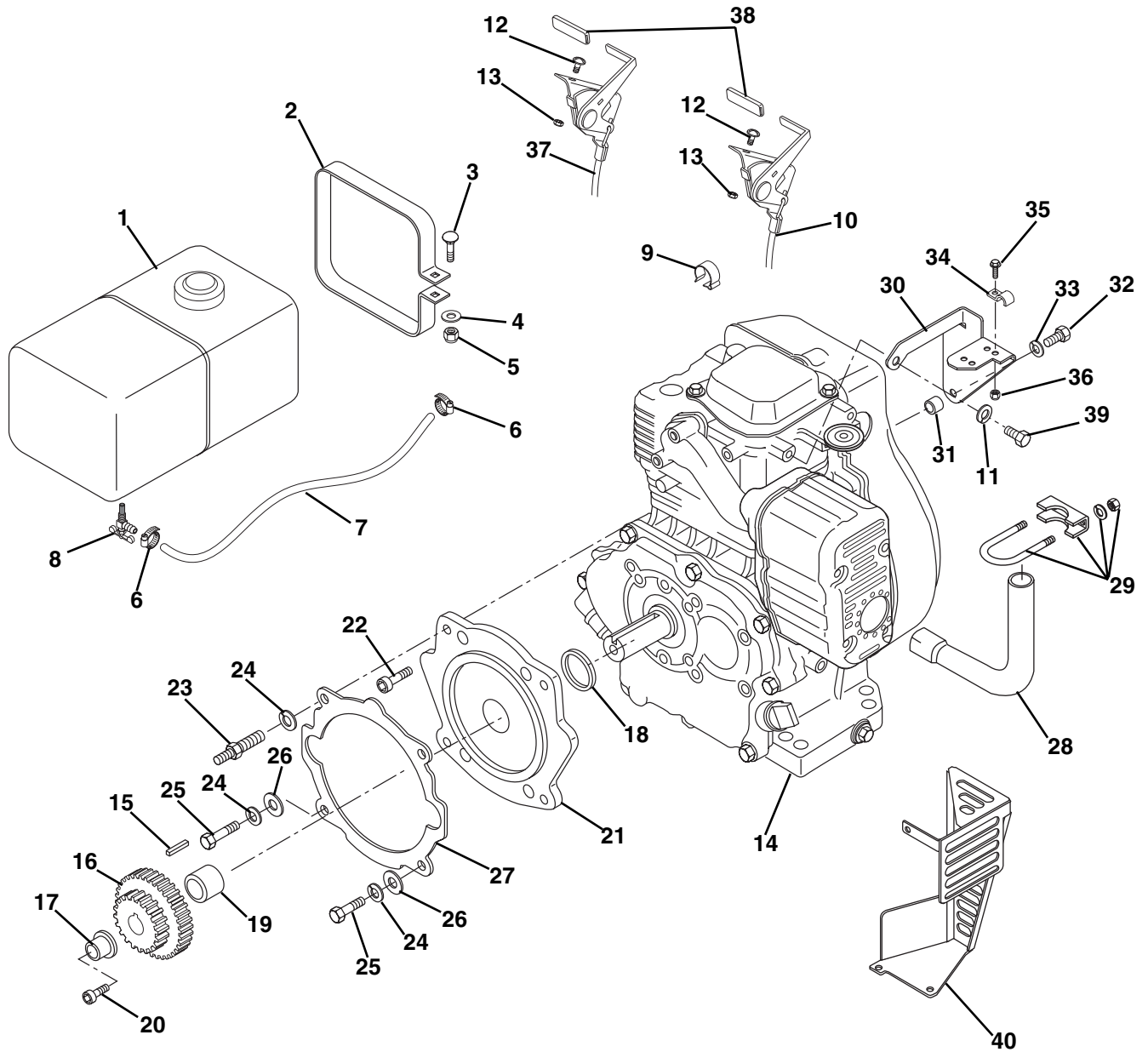
Model 985114, 115, 117, 119, 307, 309, 311, 312, 313



Item	Part No.	Qty.	Description
1	05947900	4	Bolt-Hex .25-20 x .50 Grade 5
2	012694	4	Washer-Flat-Steel .281 x 1.250 x .048
3	044485	1	Assembly-Forward Reverse Lever
4	05957200	2	Bolt-Hex .31-18 x 2.00 Grade 5
5	06529800	4	Nut-Locking-Center .312-18 Grade 2
6	124545	2	Key-Woodruff .13 x .63
7	06439000	4	Washer-Flat .812 x 1.500 x .139
8	010663	4	O-Ring .750 x 1.0
9	010618	4	Bushing-Sleeve .749 x 1.00 x .625
10	010625	2	Shaft-Actuating
11	010617	1	Plug-Oil Filler
12	010622	1	Assembly-Dip Stick
13	041562	1	Guide-Dip Stick
14	042164	1	Bracket-PTO Switch
15	06437200	2	Washer-Flat-Steel .344 x .688 x .065
16	020822	1	Spacer-Strap
17	08573100	1	Arm-Shifter
18	012123	2	Bushing-Flange .344 x .562 x .866
19	05952600	2	Bolt-Hex .31-18 x 2.50 Grade 5
20	040667	1	Assembly-Hi-Lo Lever
21	102591	2	Screw-Set .38-16 x .25
22	456384	1	Pin-Roll .250 x .75
23	010688	1	Body-Shipper Shaft
24	043351	1	Shaft-Shipper
	045187	1	Guard-Shipper Shaft
25	018318	1	Gasket-Shipper Shaft
26	043351	1	Shaft-Shipper
27	043352	1	Block-Trunnion

FUEL AND EXHAUST SYSTEM - 8.5 HP ROBIN

Model 985115, 307



PH0391

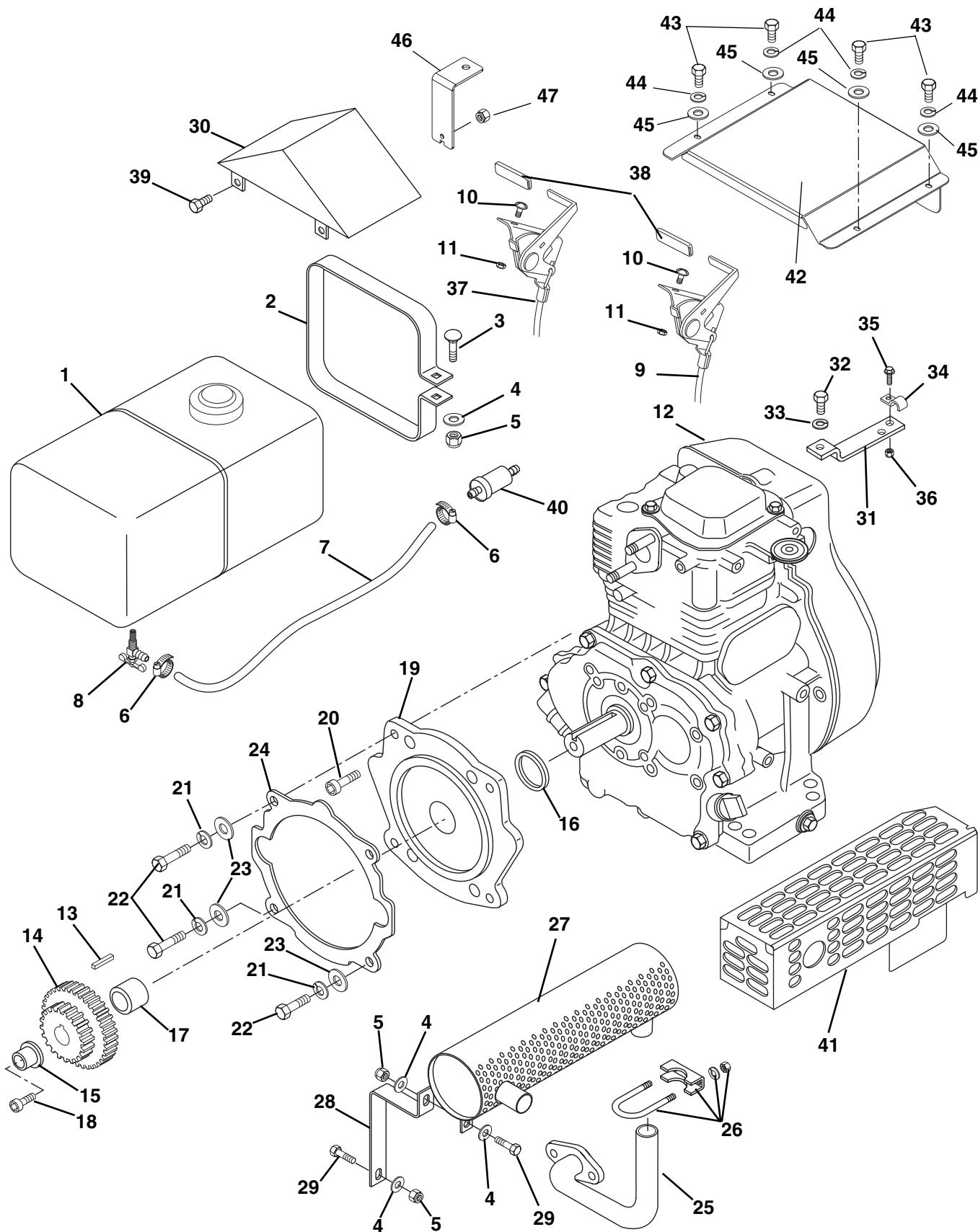
FUEL AND EXHAUST SYSTEM - 8.5 HP ROBIN

Model 985115, 307

Item	Part No.	Qty.	Description
1	08575100	1	Tank,Gas with Cap
2	010640	2	Strap-Fuel Tank
3	06220000	2	Bolt-Round Head Square Neck .25-20 x 1.75
4	06437300	5	Washer-Flat-Steel .281 x .620 x .065
5	06529700	4	Nut-Locking-Center .250-20 Grade 2
6	032045	2	Clamp-Hose
7	021134	2 Ft.	Gas Line-Bulk
8	007354	1	Valve & Strainer
9	008260	1	Clamp
10	06941900	1	Cable-Control (Throttle)
11	06308600	1	Washer-Locking .31 x .078 Regular
12	06116700	4	Screw-Machine 10-24 x .50
13	06536000	4	Nut-Locking Nylon 10-24
14	08255700	1	Engine-8HP Robin
15	009213	1	Key-Square .248 x 1.0 x .248
16	046410	1	Gear
17	046411	1	Pilot-Gear
18	022506	1	Seal 1.188 x 2.000 x .250
19	08572900	1	Spacer-Steel 1.00 x 1.31 x .836
20	453440	1	Screw-Machine .38-24 x 1.00
21	08571700	1	Adapter
22	05930400	1	Screw-Socket Head .38-16 x 1.00
23	040404	1	Stud
24	06310700	4	Washer-Lock .438 x .133
25	05962800	3	Bolt-Hex .44-14 x 1.50
26	120395	3	Washer-Flat-Steel .469 x .938 x .065
27	010635	1	Gasket-Chassis to Adapter
28	049191	1	Elbow
29	014728	2	Clamp-Muffler 1.25
30	08594300	1	Bracket-Cable Mount
31	03233600	1	Spacer
32	05972000	1	Bolt-Hex M6 x 1.00 x 20
33	06308400	1	Washer-Locking .25 x .062 Regular
34	045242	2	Clip-Cable
35	06116900	2	Screw-Machine Hex Washer Head 10-24 x .75
36	06536000	2	Nut-Locking-Nylon 10-24 w/ Insert
37	06942000	1	Cable-Control (Choke)
38	07521500	2	Grip
39	05956300	1	Bolt-Hex M8 x 1.25 x 16
40	08596500	1	Muffler Guard (307)

FUEL AND EXHAUST SYSTEM - 13.5 HP ROBIN/12.0 HP KOHLER

Model 985117, 119, 309, 311, 312



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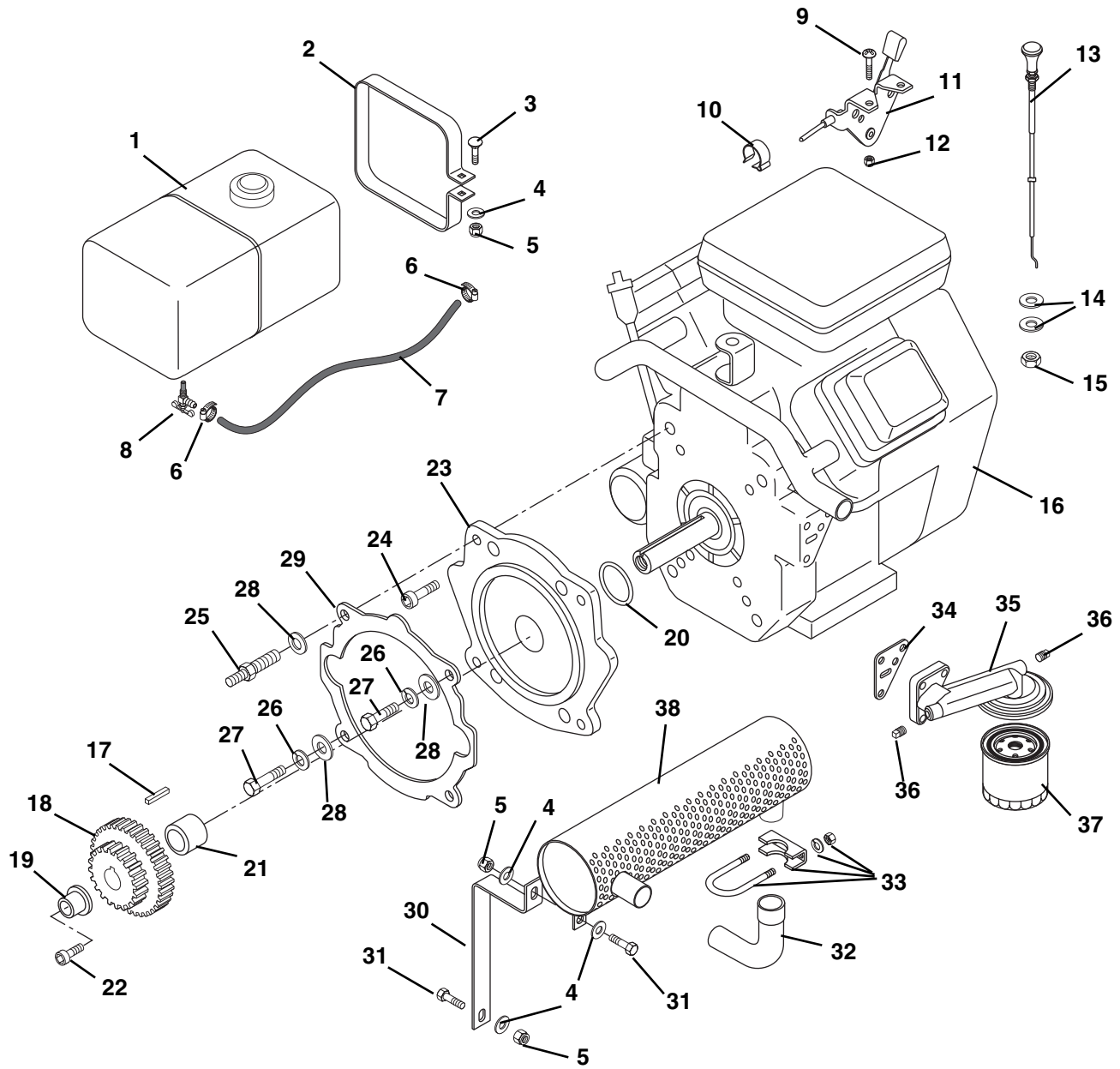
FUEL AND EXHAUST SYSTEM - 13.5 HP ROBIN/12.0 HP KOHLER

Model 985117, 119, 309, 311, 312

Item	Part No.	Qty.	Description
1	08575100	1	Tank, Gas with Cap
2	010640	2	Strap-Fuel Tank
3	06220000	2	Bolt-Round Head Square Neck .25-20 x 1.75
4	06437300	5	Washer-Flat-Steel .281 x .620 x .065
5	06529700	4	Nut-Locking-Center .250-20 Grade 2
6	032045	2	Clamp-Hose
7	021134	2 Ft.	Gas Line-Bulk
8	007354	1	Valve & Strainer
9	06941900	1	Cable-Control (Throttle) (117, 309, 311, 312)
	06949900	1	Control, Throttle (119)
10	06116700	4	Screw-Machine 10-24 x .50
11	06536000	4	Nut-Locking Nylon 10-24
12	08255800	1	Engine-13.5HP Robin EH41 (117, 309, 311, 312)
	08269400	1	Engine-12HP Kohler Command Pro CS125T (119)
13	009213	1	Key-Square .248 x 1.0 x .248
14	046410	1	Gear
15	046411	1	Pilot-Gear
16	022506	1	Seal 1.188 x 2.000 x .250 (117, 309, 311, 312)
	05619600	1	Seal 1.375 x 2.000 x .315 (119)
17	08572900	1	Spacer-Steel 1.00 x 1.31 x .836 (117, 309, 311, 312)
	00162300	1	Spacer, 1.007 x 1.312 x .989 (119)
18	453440	1	Screw, Machine .38-24 x 1.00
19	08571700	1	Adapter
20	05930400	1	Screw-Socket Head .38-16 x 1.00
21	06310700	4	Washer-Lock .438 x .133
22	05962800	4	Bolt-Hex .44-14 x 1.50
23	120395	4	Washer-Flat-Steel .469 x .938 x .065
24	010635	1	Gasket-Chassis to Adapter
25	08590800	1	Manifold (117, 309, 311, 312)
	08499500	1	Weldment- Exhaust Pipe (119)
26	014728	2	Clamp-Muffler 1.25
27	044399	1	Muffler
28	049327	1	Bracket-Exhaust
29	05947700	2	Bolt-Hex .25-20 x 1.00 Grade 5
30	08578700	1	Panel-Linkage Cover (117, 309, 311, 312)
31	08594400	1	Bracket-Cable Mount (117, 309, 311, 312)
32	05974900	1	Bolt-Hex M6 x 1.00 x 20 (117, 309, 311, 312)
33	06308400	1	Washer-Locking .25 x .062 Regular (117, 309, 311, 312)
34	045242	1	Clip-Cable (117, 309, 311, 312)
35	06116900	1	Screw-Machine Hex Washer Head 10-24 x .75 (117, 309, 311, 312)
36	06536000	1	Nut-Locking-Nylon 10-24 w/ Insert (117, 309, 311, 312)
37	06942000	1	Cable-Control (Choke) (117, 309, 311, 312)
	06950000	1	Cable, Choke (119)
38	07521500	2	Grip
39	05956300	4	Bolt-Hex M8 x 1.25x16 (117, 309, 311, 312)
40	040742	1	Filter-Fuel
41	08595800	1	Weldment-Muffler Guard (309, 311, 312)
42	084994531	1	Cover-Fuel Pump (119)
43	05969800	4	Bolt-Hex M6 x 1.0 x 12 (119)
44	06308400	4	Washer-Lock .25 x .062 (119)
45	06442300	4	Washer-Flat-Steel .250 x .562 x .049 (119)
46	08603451	1	Mount, Choke Cable (119)
47	06541700	1	Nut, Locking Nylon M8-1.25 (119)

FUEL AND EXHAUST SYSTEM - 16HP BRIGGS AND STRATTON

Model 985114



PH0371

FUEL AND EXHAUST SYSTEM - 16HP BRIGGS AND STRATTON

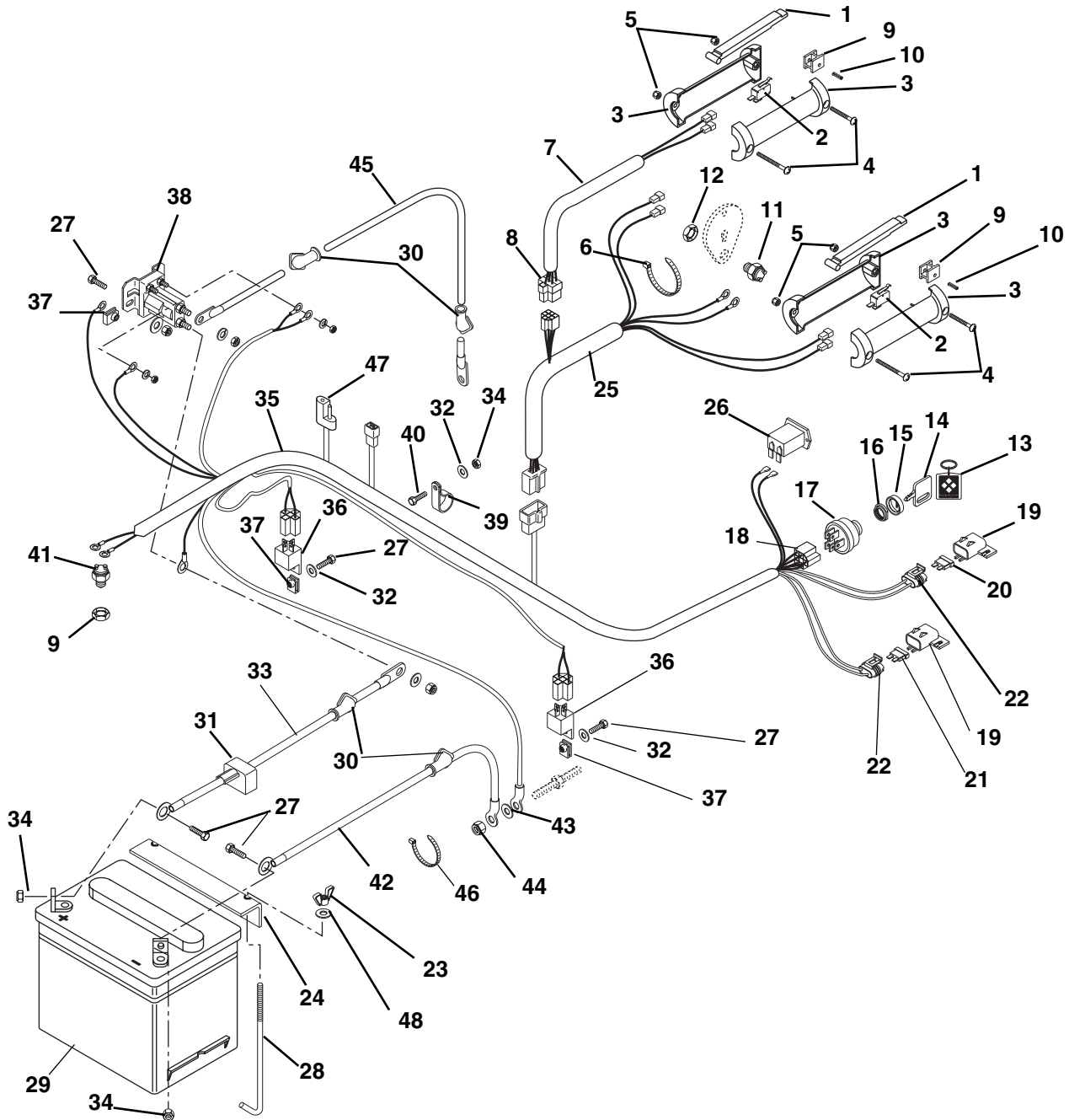
Model 985114

Item	Part No.	Qty.	Description
1	08575100	1	Tank-Fuel, w/Cap-Black, 2-Wheel
2	010640	2	Strap-Fuel Tank
3	06220000	2	Bolt-Round Head Square Neck .25-20 x 1.75
4	06437300	5	Washer-Flat-Steel .281 x .620 x .065
5	06529700	4	Nut-Locking-Center .250-20 Grade 2
6	032045	2	Clamp-Hose
7	021134	2 Ft.	Gas Line-Bulk
8	007354	1	Valve and Strainer
9	06116700	2	Screw-Machine 10-24 x .50
10	008260	1	Clamp
11	050133	1	Control-Choke Plated
12	06536000	2	Nut-Locking Nylon 10-24
13	050132	1	Lever-Choke Control
14	06436200	2	Washer-Flat-Steel .406 x .812 x .065
15	06534700	1	Nut-Jam .375-24
16	08251900	1	Engine-16 HP B & S
17	009213	1	Key-Square .248 x 1.0 x .248
18	046410	1	Gear
19	046411	1	Pilot-Gear
20	047144	1	O-Ring 1.850 x 2.270 x .210
21	046436	1	Spacer 1.05 x 1.31 x 1.54
22	453440	1	Screw-Machine .38-24 x 1.00
23	046989	1	Adapter
24	421648	1	Screw-Socket Head .44-14 x 1.00
25	040404	1	Stud
26	06310700	4	Washer-Lock .438 x .133
27	05962800	3	Bolt-Hex .44-14 x 1.50
28	120395	3	Washer-Flat-Steel .459 x .938 x .065
29	010635	1	Gasket-Chassis to Adapter
30	049327	1	Bracket-Exhaust
31	05947700	2	Bolt-Hex .25-20 x 1.00 Grade 5
32	049191	1	Elbow
33	014728	2	Clamp-Muffler 1.25
34*	051418	1	Gasket-Oil Filter Adapter
35	08518300	1	Oil Filter Manifold
36	07027200	2	Plug-Pipe 1/16-27
37*	051422	1	Filter-Oil
38	044399	1	Muffler-16 HP

NOTE: Items 34 and 37 are Briggs & Stratton parts numbers. Service parts can be purchased from your local Briggs & Stratton Distributor.

ELECTRICAL SYSTEM - ELECTRIC START

Model 985114, 115, 117, 119, 307, 309, 311, 312, 313



PH0143

Item	Part No.	Qty.	Description
1	046822	2	Lever
2	046823	2	Switch
3	08870200	2	Handle-Left Hand & Right Hand
4	06118300	4	Screw-Machine 10-24 x 1.50
5	06536000	3	Nut-Locking-Nylon 10-24
6	041634	12	Tie Wrap-Black
7	08594200	1	Harness-Steering Brake (114,117, 119, 309)
8	038057	1	Connector
9	08855100	3	Holder-Switch
10	05808100	2	Pin-Roll .094 x .75

ELECTRICAL SYSTEM - ELECTRIC START

Model 985114, 115, 117, 119, 307, 309, 311, 312, 313

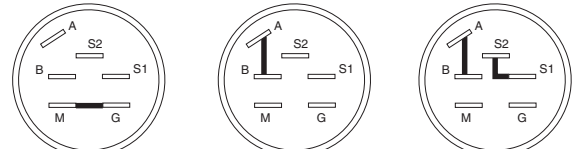
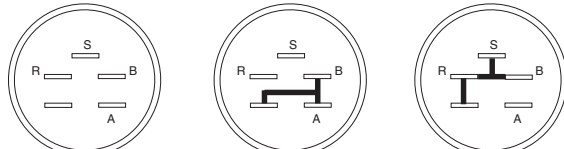
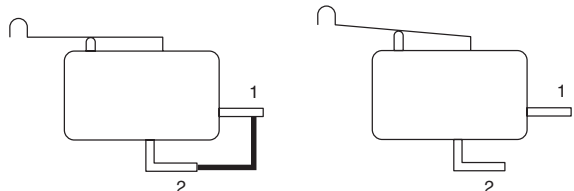
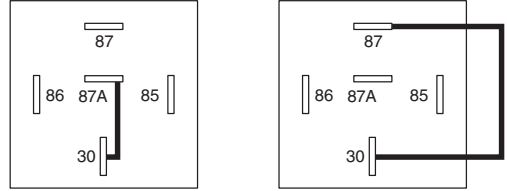
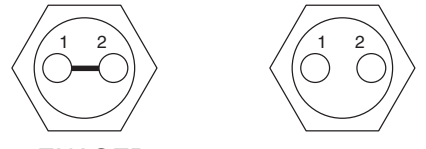
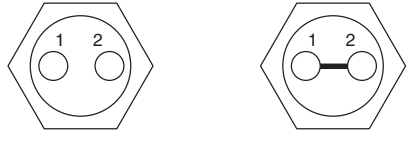
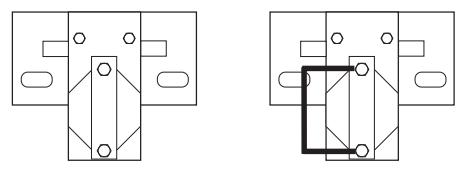
Item	Part No.	Qty.	Description
11	051919	1	Switch-Interlock Closed (Forward/Reverse)
12	107354	2	Nut-Stamped .56-18
13	045842	1	Key Chain
14	02460700	1	Key Switch
15	045490	1	Cap-Ignition Switch
16	045489	1	Nut-Panel .562-24
17	03602300	1	Ignition Switch (115, 117, 119, 307, 309, 311-313)
	019223	1	Ignition Switch (114)
18	038058	1	Connector
19	045921	1	Cover (114, 115, 117, 307, 309, 311-313)
	045921	2	Cover (119)
20	00524600	1	Fuse-30 AMP (115,117, 307, 309, 311, 312)
	00580600	1	Fuse-20 AMP (119)
	045037	1	Fuse-25 AMP (114)
21	00524700	1	Fuse-15 AMP (119)
22	045920	1	Assembly-Connector Weather Tight (114, 115, 117, 307, 309, 311-313)
	045920	2	Assembly-Connector Weather Tight (119)
23	06537500	2	Nut-Wing .250-20
24	015258	1	Hold Down
25	047306	1	Harness-Wiring Handlebar (114)
	08591000	1	Harness-Wiring Handlebar (115,117,119, 307, 309, 311, 312)
26	038256	1	Hour Meter
27	06116900	3	Screw-Machine 10-24 x .75 Hex Washer Head
28	015257	2	Tie Down
29	01554800	1	Battery
30	033847	4	Boot-Insulator (114, 115, 117, 307, 309, 311-313)
	033847	2	Boot-Insulator (119)
31	039619	1	Insulator
32	06437300	4	Washer-Flat-Steel .281 x .620 x .065
33	02727200	1	Cable-Battery to Solenoid (115, 117, 307, 309, 311, 312)
	02743300	1	Cable-Battery to Solenoid (114)
	08987000	1	Cable-Battery to Solenoid (119)
34	06529700	3	Nut-Locking-Center .25-20
35	051899	1	Harness-Wiring (114)
	08590900	1	Harness-Wiring (115, 117, 307, 309, 311, 312)
	08598400	1	Harness-Wiring 12 HP Kohler (119)
36	040216	1	Relay (115, 117, 307, 309, 311, 312)
	040216	2	Relay (119)
37	07027700	2	Nut-Retaining Ring #10-24 (114, 115, 117, 307, 309, 311-313)
38	044766	1	Solenoid (114, 115, 117, 307, 309, 311-313)
39	050394	2	Clamp-Cushioned Steel
40	05946800	2	Bolt-Hex .25-20 x .75 Grade 5
41	051918	1	Switch-Interlock Open (PTO)
42	09222700	1	Cable-Negative Battery
43	06436200	1	Washer-Flat-Steel .406 x .812 x .065
44	06535500	1	Nut-Locking-Center .375-16 Grade 2
45	02743300	1	Cable-Solenoid to Starter (115, 117, 307, 309, 311, 312)
	041815	1	Cable-Solenoid to Ground (114)
46	044321	4	Tie Wrap Black
47	03081700	1	Molded Diode Plug- Clear 1 AMP
48	06435800	2	Washer-Flat-Steel .312 x.734 x .065

CONTINUITY DIAGRAM

Model 985114, 115, 117, 119, 307, 309, 311, 312, 313

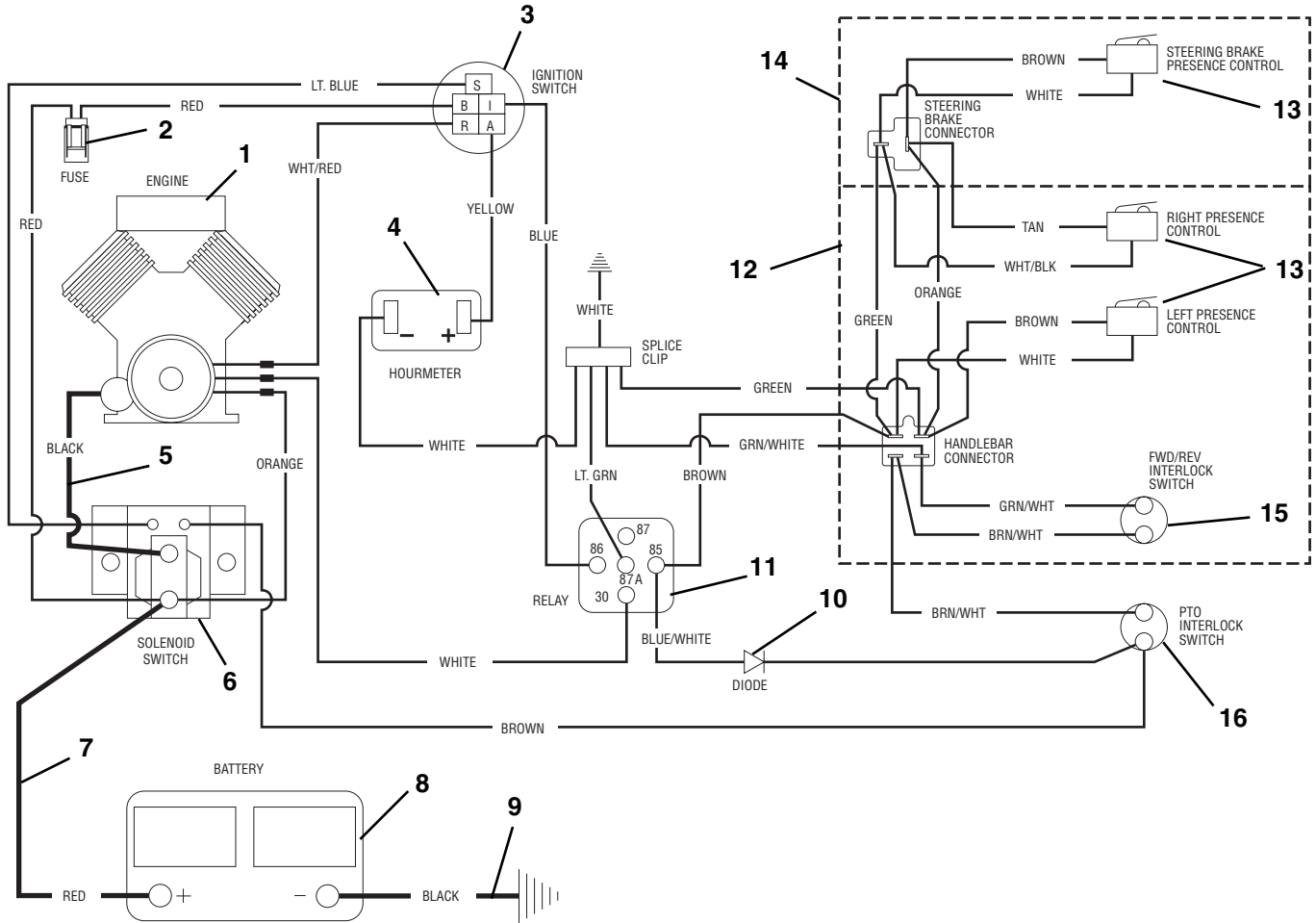
The diagrams below show the various states of connection for electrical components.
The solid lines on switches show continuity.

NOTE: All switches are viewed from the rear.

<p>Key Switch (115, 117, 119, 307, 309, 311, 312, 313) (03602300)</p>  <p style="text-align: center;">OFF RUN START</p>	<p>Key Switch (114) (019223)</p>  <p style="text-align: center;">OFF RUN START</p>
<p>Handlebar and Steering Brake Switch (046823)</p>  <p style="text-align: center;">HAND ON HANDLE HAND OFF HANDLE</p>	<p>Relay (040216)</p>  <p style="text-align: center;">NOT ENERGIZED ENERGIZED</p>
<p>PTO Switch (051918)</p>  <p style="text-align: center;">ENAGED (button out) DISENGAGED (button in)</p>	<p>Forward/Reverse Switch (051919)</p>  <p style="text-align: center;">NEUTRAL (button out) FORWARD OR REVERSE (button in)</p>
<p>Solenoid (044766)</p>  <p style="text-align: center;">NOT ENERGIZED ENERGIZED</p>	

WIRING DIAGRAM

Model 985114

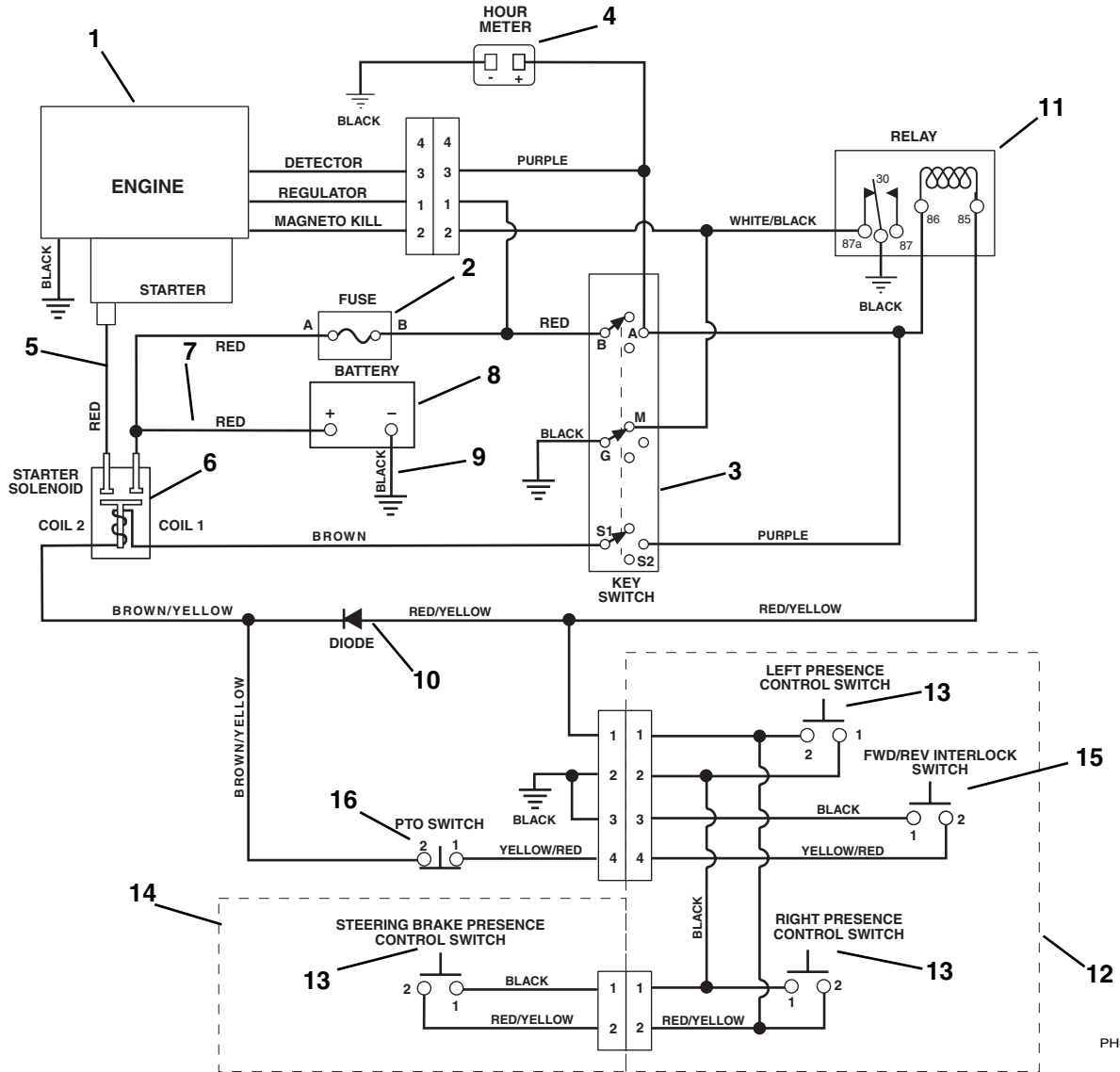


PH0331

Item	Part No.	Qty.	Description
1	08251900	1	Engine, Briggs and Stratton 16HP V Twin H/S
2	045037	1	Fuse, 25 AMP
3	019223	1	Ignition Switch
4	038256	1	Hour Meter
5	041815	1	Cable
6	044766	1	Solenoid
7	02743300	1	Cable, Battery-To-Solenoid
8	01554800	1	Battery
9	09222700	1	Cable, Negative Battery 35"
10	03081700	1	Molded Diode Plug- Clear 1 AMP
11	040216	1	Relay
12	047306	1	Harness, Wiring Handlebar
13	046823	3	Switch
14	08594200	1	Harness, Steering Brake
15	051919	1	Switch, Interlock Closed (Forward/Reverse)
16	051918	1	Switch, Interlock Open (PTO)

WIRING DIAGRAM

Model 985115, 117, 307, 309, 311, 312

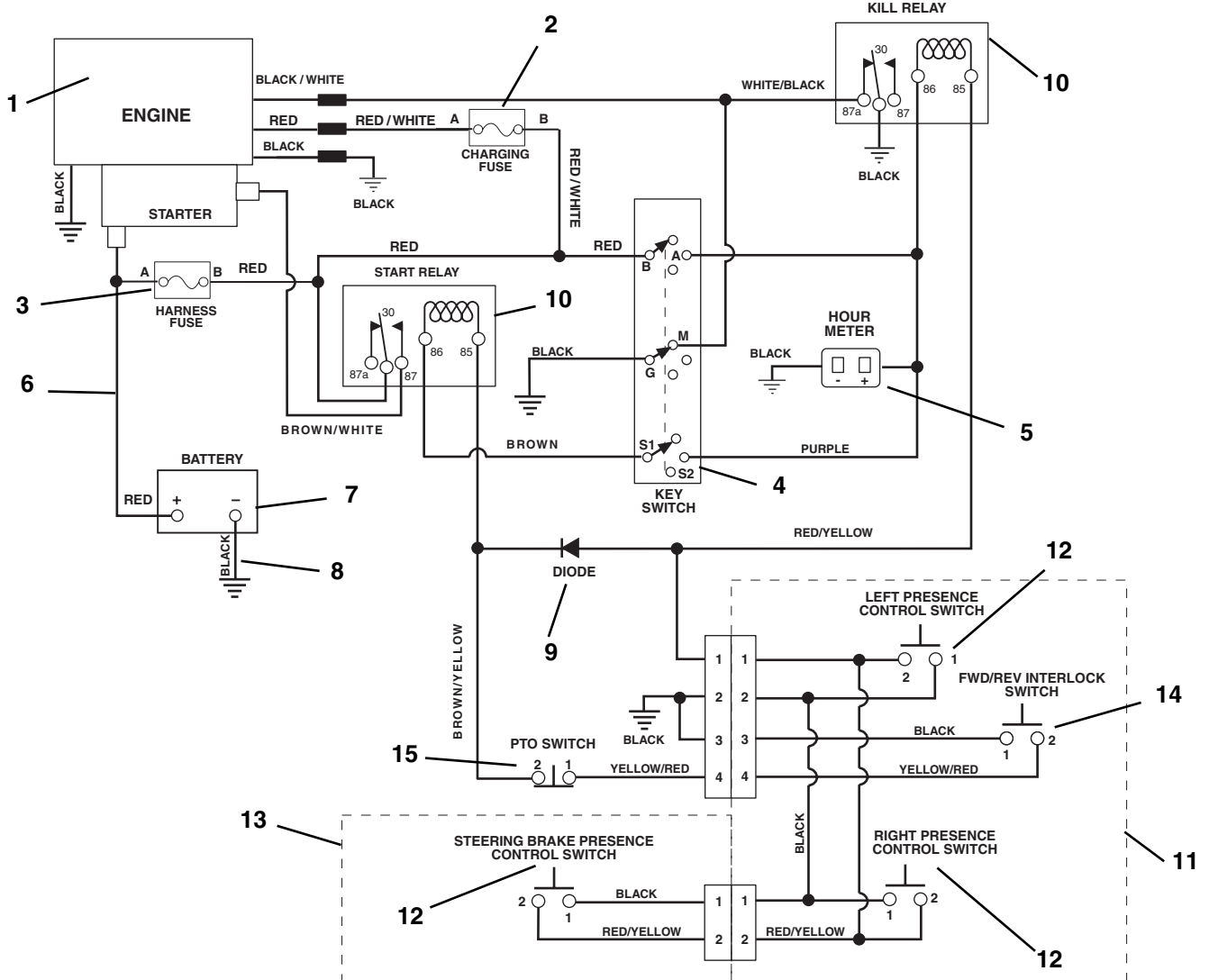


PH0351

Item	Part No.	Qty.	Description
1	08255700	1	Engine, Robin (115, 307)
	08255800	1	Engine, Robin (117, 309, 311, 312)
2	00524600	1	Fuse 30 AMP
3	03602300	1	Key Switch
4	038256	1	Hour Meter
5	02743300	1	Start Cable 22"
6	044766	1	Solenoid
7	02727200	1	Starter Cable 13" - Battery to Solenoid
8	03621100	1	Battery with Tube (307, 309, 311, 312)
	01554800	1	Battery (115, 117)
9	09222700	1	Cable, Negative Battery 35"
10	03081700	1	Molded Diode Plug- Clear 1 AMP
11	040216	1	Relay
12	08591000	1	Harness, Handlebar
13	046823	3	Switch
14	08594200	1	Harness, Steering Brake
15	051919	1	Switch, Interlock Closed (Forward/Reverse)
16	051918	1	Switch, Interlock Open (PTO)

WIRING DIAGRAM

Model 985119



PH0351

Item	Part No.	Qty.	Description
1	08269400	1	Engine, Kohler Command Pro CS12ST (119)
2	00524700	1	Fuse 15 AMP
3	00580600	1	Fuse 20 AMP
4	03602300	1	Key Switch
5	038256	1	Hour Meter
6	02743300	1	Start Cable 22"
7	01554800	1	Battery
8	09222700	1	Cable, Negative Battery 35"
9	03081700	1	Molded Diode Plug- Clear 1 AMP
10	040216	2	Relay
11	08591000	1	Harness, Handlebar
12	046823	3	Switch
13	08594200	1	Harness, Steering Brake
14	051919	1	Switch, Interlock Closed (Forward/Reverse)
15	051918	1	Switch, Interlock Open (PTO)



GRAVELY

A Division of Ariens Company

655 West Ryan Street

P.O. Box 157

Brillion, WI 54110-0157

920-756-2141

Fax 920-756-2407

www.gravelly.com